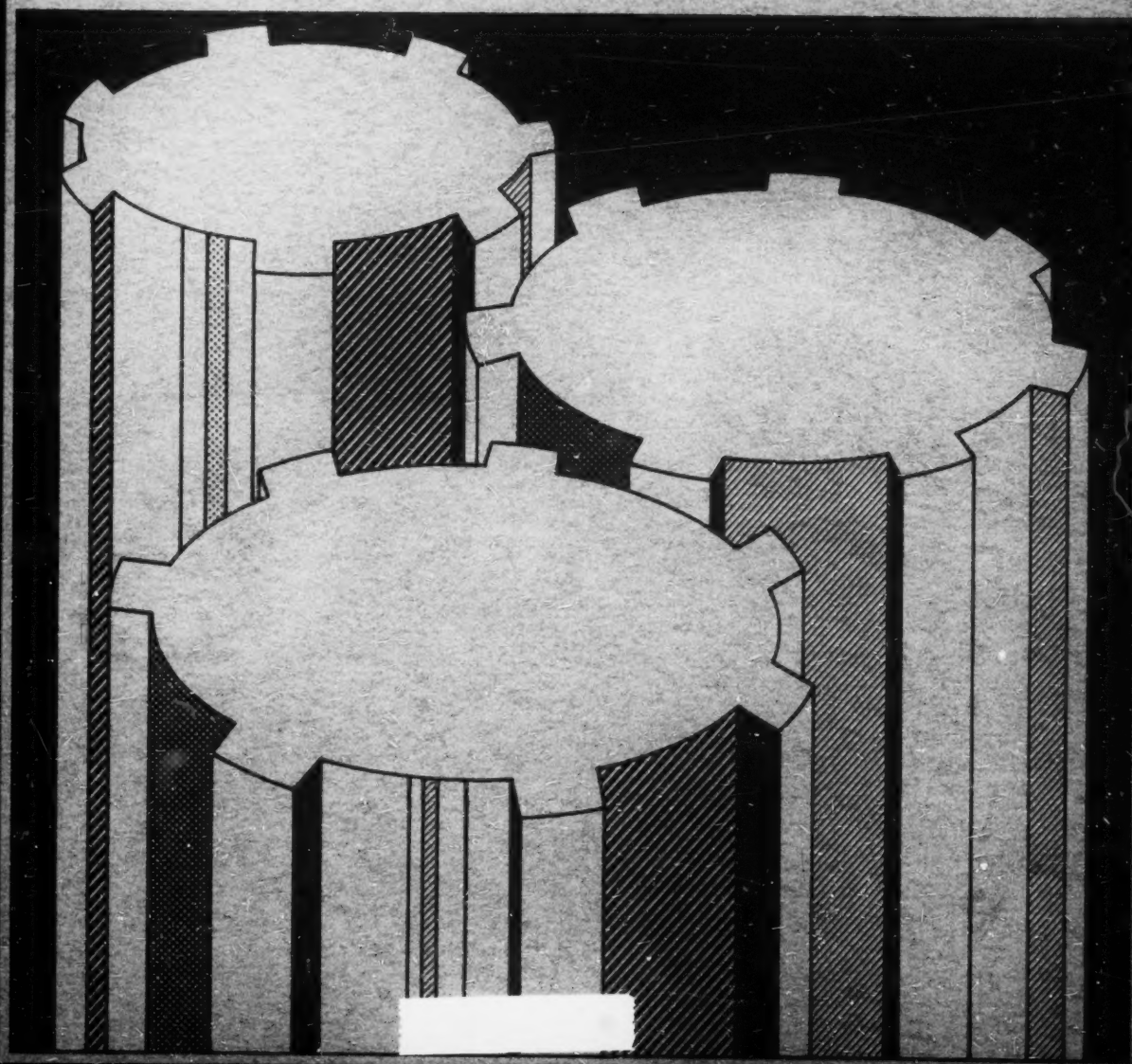




CONGRESS OF THE UNITED STATES  
CONGRESSIONAL BUDGET OFFICE

JUNE 1987

# ***The GATT Negotiations and U.S. Trade Policy***



CBQ STUDY

THE GATT NEGOTIATIONS  
AND U.S. TRADE POLICY

The Congress of the United States  
Congressional Budget Office

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## PREFACE

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In September 1986, the member nations of the General Agreement on Tariffs and Trade (GATT) inaugurated a new round of negotiations aimed at further opening the world trading system. The Congress must provide U.S. representatives at these negotiations with negotiating authority and policy direction, and will be asked to ratify the final results when talks end, several years from now. These negotiations come at a time when trade imbalances have become a source of tension in the world economy and when governments are playing a growing and important role in determining the flow of commerce. This report, requested by the Subcommittee on International Trade of the Senate Finance Committee, provides an overview of this round of trade talks and examines how they might affect four sectors of the U.S. economy--high-technology goods, agriculture, mature industries, and services. In keeping with the mandate of the Congressional Budget Office to provide objective analysis, no recommendations are made.

This report was prepared in CBO's Natural Resources and Commerce Division, under the direction of Everett M. Ehrlich and Elliot Schwartz. Stephen Parker made valuable contributions to the content and structure of the report throughout its development. The overview and historical material was written by Stephen Parker and Elliot Schwartz. Chapters on specific sectors were written by Daniel P. Kaplan, Stephen Parker, Elliot Schwartz, and Philip C. Webre. Roger Hitchner, David Trechter, and James G. Vertrees contributed to the chapter on agriculture; Gwyn Adams and Jerrold Abrahams to the chapter on services. Kristen Galles, Peter Glick, Julie Goldman, and Pam Pritchard provided research assistance. Valuable comments were received from Victoria Farrell, Neil Fisher, George Iden, Andrew Horowitz, James Kiefer, and Eileen Manfredi of CBO, and from Robert Baldwin, Thomas Dorsey, Harry Freeman, Robert Hudec, Gary Saxonhouse, Nancy Schwartz, and Lee Tuthill. Helpful suggestions were also made by the Office of the U.S. Special Trade Representative. The report was edited by Francis Pierce, assisted by Nancy H. Brooks, and prepared for publication by Kathryn Quattrone, assisted by Pat Joy.

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June 1987





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## SUMMARY AND CONCLUSIONS

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The General Agreement on Tariffs and Trade (GATT) is both a multilateral agreement and an organization that administers the agreement among the 93 signatories. Seven rounds of GATT-sponsored multilateral trade negotiations have progressively lowered postwar tariff barriers, and an eighth round--the "Uruguay Round"--is now taking place.

The Uruguay Round is occurring at a critical juncture in international trade relations. The GATT rules and procedures that have successfully guided four decades of trade liberalization show signs of breaking down. Unless confidence in GATT is renewed, present difficulties could lead to a costly global trade war.

## IMPORTANCE OF THE URUGUAY ROUND

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Governments are increasingly resorting to policies that are not regulated by GATT, and that conflict with its principles of open and nondiscriminating trade. Such government actions are often felt to be essential to maintaining the competitiveness of national industries. As tensions rise, this tendency may escalate into retaliatory measures and countermeasures. The importance of the Uruguay Round lies not so much in how any one of the items on its agenda is resolved as in the recognition by governments of the need to modernize the GATT framework so as to reflect the increasing importance of international markets, and to accept the resulting changes in their own policies.

Many hope that new GATT agreements will work to reduce the huge U.S. trade deficit. Such a hope is probably misplaced. Most of the aggregate trade deficit can be attributed to divergent macroeconomic policies among the major industrialized countries. In particular, high U.S. government budget deficits have been a major cause of the recent surge in the U.S. trade deficit.

The Uruguay Round requires attention from the Congress for several reasons. Most immediately, the Congress must provide new authority for these negotiations, along with policy direction. In addition, it must consider



the possible effects of the Uruguay Round on federal programs that are sensitive to international trade--most obviously in agriculture. Through their effects on such programs, new trade agreements could ultimately have an impact on the federal budget.

Trade negotiations take time. This round of talks--preliminary negotiations have already begun--is not scheduled to end until 1991, although some interim agreements may be reached before then. After Congressional approval, more time will be required to phase in the new policies. Whatever the outcome of the trade talks, then, most of the direct effects on U.S. policy and economic activity will not occur until well into the 1990s.

The Uruguay Round could nevertheless have an immediate impact on the way governments deal with their trade problems. If the talks were to deadlock, governments might resort to actions outside the realm of GATT to serve their national interests. On the other hand, indications that the talks were moving toward a successful resolution of key problems would lessen pressure for immediate and possibly harmful government actions. In this sense, the talks will succeed in the short run if they foster an atmosphere of cooperation that reduces current tensions among countries.

The main focus of these negotiations, however, will be on the long term. The benefits of open trade are well known: trade expands the range of goods available for consumption and increases productivity by allowing producers to specialize according to their resources and technology. But opening up trade creates problems, such as how to address the unequal distribution of benefits and losses among different groups in a country, and how to react when another country attempts to promote some of its own industries at the expense of its trading partners.

One way of analyzing the Uruguay Round is to examine its possible consequences for particular sectors of the U.S. economy. This report looks at four broad sectors--high-technology goods, agriculture, mature industrial products, and services--to see how they might be affected by trade liberalization.

## THE URUGUAY ROUND IN PERSPECTIVE

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The Uruguay Round will be judged largely on how well it addresses issues related to nontariff barriers. Examples of nontariff barriers (NTBs) range from direct quantitative controls on imports to the less visible effects of national economic policies on trade flows. GATT has been unable to regu-

late the use of NTBs for a number of reasons: they are inherently less "transparent" in their effects than tariffs, which makes them difficult to evaluate; and they are often linked directly to national policies that are based on domestic rather than international priorities.

### The General Agreement on Tariffs and Trade

The GATT was created following the Second World War as one of three international organizations intended to oversee postwar economic relations, the other two being the International Monetary Fund and the World Bank. GATT's members today account for over 80 percent of world trade.

Four key principles underlie the General Agreement:

- o Member countries should work for the steady reduction of trade barriers and the elimination of quotas.
- o Trade policies among member countries should be applied on a nondiscriminatory (most-favored-nation) basis.
- o A tariff concession, once made, cannot be rescinded without compensation to affected countries, and other forms of protection cannot be substituted to circumvent the concession.
- o Trade conflicts should be settled by consultation.

These principles are not inviolate; exceptions to them have always been tolerated. In fact, many of GATT's current problems stem from both old and new evasions of these principles. Examples of current exceptions include:

- o The Multifiber Agreement governing trade in textiles and apparel;
- o Voluntary export restraints, such as the recent U.S. limits on automobile imports from Japan;
- o Escape-clause actions, such as the recent protection given the motorcycle industry;
- o Agricultural import quotas and agricultural subsidies;
- o Barriers to trade in services, and the failure to protect intellectual property rights;

- o Free trade areas, such as the European Community;
- o Preferential treatment for developing countries;
- o Nontariff barriers to trade; and
- o Retaliatory trade actions.

This list of exceptions to GATT's general principles will comprise much of the agenda for the Uruguay round of multilateral trade negotiations. In essence, the agenda aims to strengthen GATT discipline and expand it to cover all trade in goods and services. If successful, most nontariff policies would come within its purview, which would extend to all major trading countries of the world. The primary concern, however, is not so much strengthening the role of GATT as resolving fundamental disagreements among countries over the role of government in economic activities.

#### IMPLICATIONS OF THE URUGUAY ROUND FOR U.S. GOVERNMENT PROGRAMS

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A distinguishing feature of the Uruguay Round is its emphasis on liberalizing trade barriers--especially NTBs--that are integrally linked to national economic policies. Foreign trade can no longer be dealt with apart from other domestic economic policy concerns. Governments often employ trade policies less for commercial ends than to achieve other goals--economic, political, and social. Significant trade liberalization thus means changing these national programs, and for this reason domestic policies will increasingly be the focus of trade negotiations.

The following is an illustrative, but not comprehensive, list of U.S. government policies that are effectively on the Uruguay Round bargaining table:

- o Farm programs (including export subsidies, import quotas, and domestic price and income support programs);
- o Federal support for research and development;
- o Tax policies that favor domestic producers;
- o National security regulations;

- o Trade Adjustment Assistance and the Job Training Partnership Act;
- o Various trade policy procedures (notably, escape-clause actions);
- o Antitrust regulations;
- o Import quotas (or voluntary export restraints) for various manufacturing goods;
- o All import tariffs;
- o Government procurement practices that favor domestic goods;
- o Federal and state regulations governing banks and other financial institutions;
- o Immigration laws;
- o Transportation regulations (including airlines and shipping);
- o Patent and copyright law, and other intellectual property rights laws;
- o Technical standards and health and safety rules;
- o Bilateral economic agreements;
- o Rights of establishment for foreign firms;
- o U.S. economic policies toward developing countries; and
- o U.S. acquiescence to GATT enforcement powers.

The length of this list illustrates the deep ramifications of foreign trade in the U.S. economy. Similarly lengthy lists could be made for most other countries. Although the Uruguay Round is not likely to require substantial changes in all of these programs, those included in the list will increasingly become the focus of future trade policy negotiations. The United States and other countries have already started reforming several of these policies on a unilateral basis in response to internal economic and political pressures.

The following discussion shows the bearing of the trade negotiations on domestic policies in four sectors. <sup>1/</sup>

### High-Technology Products

Trade in high-technology products is already covered by the GATT, but numerous disputes have arisen because many governments subsidize production of these goods in an attempt to gain a competitive advantage. An underlying issue is the extent to which governments can, and should, enhance the competitiveness of domestic producers; and how the spillover effects of such policies can be controlled.

Discussions of intellectual property rights will bear directly on high-technology goods. If an agreement can be reached that tightens the penalties against unauthorized use of patents, copyrights, and trademarks, U.S. firms holding those rights--most generally in high-technology industries--should gain.

Trade liberalization should in general benefit most U.S. producers of high-technology products--in aerospace, computers, electronics, pharmaceuticals, and scientific instruments.

### Agriculture

Most barriers to trade in agricultural products have been erected to accommodate domestic farm policy programs. In this country, for example, such restraints often serve to protect domestic farm price supports. Many other developed countries use import barriers and export subsidies in much the same way: to stabilize and nurture the domestic farm sector, not to achieve export or import goals. Such trade barriers cannot be significantly reformed without changing the domestic farm policies they serve. The negotiations will focus on the agricultural policies of developed countries, most importantly those in the United States, the European Community, Japan, Canada, and Australia. Although major policy reforms are likely to benefit the economies of all countries, some farmers may be made worse off by reductions in farm support programs, especially over a transition period. Efforts to compensate farmers for losses may be necessary. For each

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1. No attempt is made here to summarize fully the sectoral analyses contained in Chapters III-VI. A short precis appears at the beginning of each of those sectoral chapters.



country, however, the adjustment costs may be lessened if all countries concurrently open their agricultural markets, which should expand world trade and bolster prices, and if agreements are phased in over a long period of time.

### Mature Industries

These industries, such as steel, textiles, apparel, and--increasingly--automobiles, have declined in the advanced industrial countries, even as they have grown in some developing countries. They are technically covered by the GATT, but many countries have sought to develop special protective arrangements for them through formal and informal agreements. Abolishing such practices would force governments to confront the consequences of economic change, such as unemployment, and to revise policies that often impede, rather than promote, adjustment. GATT negotiations over subsidies, escape-clause procedures, and the GATT dispute settlement process will be of particular importance for mature industries. Negotiations in these sectors often take on a North-South polarization, since developing countries are rapidly becoming major suppliers of such goods to developed countries.

Agreements that liberalize trade and reduce trade barriers will have a direct impact on those mature industries that are now accorded special protection. The negative effects would be lessened if the liberalization was truly multilateral. The U.S. automobile industry, for example, might benefit from a reduction of European barriers to Japanese autos, since those barriers have diverted Japanese auto exports from Europe to the United States.

### Services

An agreement on services trade would bring a new set of national policies under international scrutiny. All countries regulate service activities to some degree--with the added complication that much of this occurs at the state or provincial level. Many of the regulations embody long-standing social values, such as consumer and producer rights, that are generally considered well within the bounds of national sovereignty. But the spillover effects can be stifling to international trade. The United States, in particular, has untapped export growth potential in many kinds of services, particularly those employing large amounts of high-skilled labor (such as construction, telecommunications, financial services, and skilled professional business services). On the other hand, the United States stands to lose from greater imports of lower-skilled, labor-intensive services (in construction, shipping, and personal services).

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## KEY ISSUES UNDERLYING THE NEGOTIATIONS

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The Uruguay Round agenda covers most of the current issues in international trade. But underlying these issues are a number of more subtle questions. How can trade policy be made more transparent? When does a national economic policy become an internationally unacceptable nontariff barrier to foreign trade? To what extent are governments willing to relinquish their sovereignty and shift their national priorities to accommodate international agreements? Should discriminating trade practices of any kind be allowed? If nontariff barriers are to be liberalized, how can this best be done? Would bilateral or multilateral agreements be preferable? When does a developing country graduate to become a full-fledged member of the international trading community?

### Need for Policy Transparency

It is difficult to measure the relative benefits and costs of trade reform unless the effects of national policies can be compared for different countries and industrial sectors. This can be done easily for ad valorem tariffs, which apply a tariff rate in percentage terms to the value of a traded good. For nontariff barriers, however, there is no such "transparent" measure of protection. To negotiate the liberalization of nontariff barriers, ad valorem equivalents of their protective impact must be measured in a way that can be consistently compared between countries, types of policies, and economic sectors. Producer subsidy equivalents, which are being employed for this purpose in the agricultural sector, are one such measure. Another way to achieve transparency is to convert nontariff barriers to equivalent ad valorem tariffs. Not only are ad valorem tariffs more transparent than nontariff barriers such as import quotas, but they also have a less distorting effect on economic decision making.

Introducing transparency requirements should favor U.S. interests by providing U.S. negotiators and firms with a much clearer picture of how foreign governments influence trade flows. Trade policy procedures in the United States are relatively open compared with those in other countries. The United States does employ several nontariff barriers to trade, and converting these to tariff equivalents would show the extent to which import quotas often represent high levels of protection. It would lessen the negative impacts of protection on the economy, and if the tariff-equivalent amounts could be collected by the government (either directly or by auctioning quota rights to the highest bidders), the Treasury would gain the quota rents that otherwise accrue to foreign exporters.



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### Rules, Enforcement, and Trade Liberalization: the Role of GATT

Considerable effort will be exerted during the Uruguay Round to devise rules to control better the use of various nontariff barriers to trade. New rules, however, require general acceptance of underlying principles. Disagreement among GATT members as to what those fundamental principles should be is a major stumbling block to improving GATT rules.

GATT's previous success in reducing tariffs was accomplished by developing a set of rules that discouraged increases in tariff rates, and then gradually reducing existing tariffs--on a most-favored-nation basis--through reciprocal bargaining during multilateral negotiations. The rules reinforced, but did not lead, the liberalization process.

A first step in liberalizing nontariff barriers will be to develop rules that clearly identify NTBs and demarcate those NTBs that are improper. Then the rules must be implemented. The Tokyo Round codes of conduct--a set of rules applying to several NTBs--relied primarily upon the good-faith compliance of signatories of the code. GATT enforcement procedures for the codes were cumbersome and ineffective. Although these codes may have restrained some governmental actions, there is little evidence that they have led to significant changes. The experience with tariffs suggests that reciprocal bargaining, involving coordinated concessions among trading partners at either the policy or the industry level, may be a more effective medium for liberalizing NTBs.

GATT dispute procedures play an important role in the trade liberalization process by encouraging countries to resolve their conflicts in an orderly manner without confrontations. Streamlining and enhancing the GATT dispute settlement process will be a major priority for the Uruguay Round. Establishing a nonpartisan standing panel of experts and applying stringent procedural deadlines can prove beneficial. But efforts to strengthen GATT's power to enforce its rules will encounter the reluctance of most governments to yield sovereignty over control of their national policies. It is unlikely that GATT will ever be the primary enforcer of its rules. Rather, in liberalizing NTBs, it will most likely rely on the adherence to mutually accepted standards of behavior by governments; its role will be to facilitate dispute settlements and other negotiations.

### The Uruguay Round and Developing Countries

More vigorous participation by developing countries in the trade talks will require concessions by the United States and other developed countries in

several ways. For example, developing countries want long-term guarantees of access to developed-country markets for their exports. Better access would involve loosening such barriers as the Multi-Fiber Agreement, along with promises by developed countries to refrain from erecting similar barriers in the future. This would force the developed countries to cede some of their existing markets to developing countries, and to adjust their domestic economies accordingly--involving difficult economic and political decisions.

Developing countries now have almost one-quarter of total world exports, and about one-eighth of world manufactured goods exports. Economic growth in developed countries is increasingly linked with the economic future of the developing countries. Yet most trade policy actions by developing countries are not regulated by GATT. Just as developing countries argue that it is not fair for developed countries to erect trade barriers that penalize them for their industrial success, so the developed countries complain of the self-serving trade policies employed by many of the most successful developing countries. Clearly, the advanced developing countries must be more fully integrated into the GATT system. The question is not so much whether this will happen as when and how it will be accomplished. Underlying the negotiations on many of the key issues in the Uruguay Round will be compromises over this graduation process.

#### Product and Country Trade Policy Discrimination

Countries increasingly resort to bilateral agreements, involving quotas and other nontariff arrangements, to solve trade disputes. Such agreements introduce two forms of trade policy discrimination: the application of policies unevenly across countries, and their application unevenly across industries. Although most forms of trade policy discrimination are discouraged by GATT, exceptions have always existed, and some observers question whether the principle of nondiscrimination will remain the basis for future trade agreements.

Most-Favored-Nation Treatment. Unconditional most-favored-nation (MFN) treatment--the application of a trade policy equally across all countries--is a cornerstone of GATT. Trade policies that discriminate by country not only complicate international trade relations and negotiations, but also may divert trade from low-cost producers to higher-cost producers. Such policies invariably induce countries not covered by an agreement to alter their behavior, often offsetting the original intent of the agreements and leading to further discord.

Violation of the MFN principle usually occurs for three reasons: a small group of countries may be able to work out an agreement more easily than a broader group (as in free trade agreements); a country aims specifically to penalize another country for what are perceived to be unfair trade practices (by retaliating against dumping, or applying countervailing duties in response to export subsidies); and a country places restrictions on imports causing injury to specific domestic interests. In certain of these situations, discriminatory practices may prove beneficial: free trade areas can create trade among the members; retaliation can force trading partners to halt unfair trading practices; and the selective application of trade remedies for the relief of threatened industries can limit the negative effects of suppressing competition. The danger, though, is that discriminatory practices may become the norm rather than the exception.

Specific Product Agreements. GATT does not explicitly require that protection be applied evenly across industries within an economy. But its general thrust is to limit the use of quantitative trade barriers--which are commonly used to provide higher levels of protection to some industries than to others--and to encourage reductions in trade barriers across all industries. Uneven protection that favors some industries relative to others can limit economic growth if low-productivity sectors are favored over higher-productivity sectors.

The case for special treatment of specific products is made on several grounds, namely: that temporary restraints provide an effective way of handling temporary market disruptions (as in autos); that specific exemptions are necessary to save the general rule of free trade, since without the ability to make exceptions the whole structure would fall; that different products have different characteristics, requiring somewhat different trading rules (as in textiles and various services); and, in the extreme, that some products (as in the steel, agriculture, and high-technology industries) are so vital to national interests that administrative solutions are preferable to market results.

Alternatively, it can be argued that most restraints to trade are detrimental to world economic growth, and often to the countries enforcing the restraints. It can also be argued that the proliferation of sectoral protection and managed-market agreements breeds more protection, as it becomes difficult to justify protection for some sectors and not for all.

The Uruguay Round will specifically address the most serious case of sectoral discrimination--that in the agricultural sector. It will also take up other specific sectoral actions, including barriers to trade in services, the

Multifiber Agreement and other voluntary export restraints in various industries, and the "safeguard" procedures that are used to implement many of these policies. The United States has been an active user of discriminatory trade policies, and the results of these trade talks may limit the flexibility of U.S. trade policy in the future.

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### IS GATT WORTH SAVING?

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The strongest defense of GATT is based more on what it has prevented rather than on its explicit accomplishments. Since the creation of GATT, world economic growth has not been fettered by nationalistic policies. Instead, it has been stimulated by expanding international trade.

GATT was created primarily to reduce the possibility of another debilitating trade war similar to that which followed the Smoot-Hawley Tariffs at the beginning of the depression. It was also intended to undo much of the damage caused by those actions. By this test, GATT can be judged quite successful. Although trade relations have suffered numerous crises over the last 40 years, these have not set back world economic growth. And GATT-sponsored multilateral negotiations have helped to reduce the Smoot-Hawley-era tariffs by over 90 percent: the average tariff rate for most developed countries is now less than 5 percent.

The value of GATT lies not only in its rules, but in the fact that it also provides a forum where countries can resolve disputes over national policies. GATT is one of the few policy forums where long-run goals guide the resolution of short-term crises. No comparable framework exists for settling other key international problems--such as how to coordinate macroeconomic policies or to lighten the burden of debt.

GATT needs to be modernized, however, and this means rethinking the principles that should guide trade policy for the rest of the century. GATT has little independent power; it merely reflects the will of its members. To revitalize it, the members will need to reexamine many long-standing domestic policies and reassess their national priorities, given increasingly important economic linkages among countries. The problem is not the inadequacy of GATT, but rather how governments are going to mesh their policies with the requirements of the world economy. Opening up the potential of international trade represents one of the great challenges facing governments today.

## CHAPTER I

### INTRODUCTION

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Over 90 countries joined together to launch the Uruguay Round of multilateral trade negotiations during a meeting of trade ministers in Punta del Este, Uruguay, last September. The Uruguay Round is the eighth sponsored by the General Agreement on Tariffs and Trade (GATT). It continues the process of adapting the GATT framework of trade agreements to ever-changing international economic conditions. Formal negotiations to determine the procedural format for the talks have already begun, and a four-year deadline has been set to complete the talks.

The United States has led the drive for new multilateral trade negotiations. Other governments have joined in--some enthusiastically, some reluctantly. Although the United States has been the prime motivator for trade liberalization since World War II, the intensity of its push for a new round reflects concerns about the economic and political ramifications of recent record trade deficits. Even though the U.S. trade deficits are primarily a response to macroeconomic policies, certain U.S. industries have suffered heavily from foreign competition.<sup>1/</sup> The result has been political pressure to redress the balance by establishing quotas or tariffs on certain imports as well as by taking aggressive actions to reduce foreign barriers to U.S. exports. Other countries have responded by pointing to the protective trade policies of the United States. Some that are reluctant to enter a new round of trade negotiations have done so rather than face the prospect of a retaliatory trade war with this country.

Negotiators in the Uruguay Round will focus on extending the GATT framework in two dimensions: to goods and services that are now not included, and--perhaps more crucially--to nontariff barriers to trade (that is, the broad range of nontariff national policies that have sizable impact on international trade). Priority will be given to the following agenda: liberal-

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1. For a clear analysis of the relationship between trade policy and the aggregate trade deficit see Rachel McCulloch and J. David Richardson, "U.S. Trade and the Dollar: Evaluating Current Policy Options," in *Current U.S. Trade Policy: Analysis, Agenda, and Administration*, Robert E. Baldwin and J. David Richardson, eds., National Bureau of Economic Research Conference Report (1985).



izing both tariff and nontariff barriers to trade in agricultural products, in tropical and natural resource products, in textiles and apparel, in steel, and in services; strengthening GATT rules and enforcement procedures, especially those related to subsidies; establishing GATT rules to protect intellectual property rights; and standardizing safeguard (escape clause) procedures across countries. Since many of these issues deal specifically with policies employed by developing countries, expanding the GATT framework in this way will force a reassessment of the role of developing countries' policies in the world trading system. And given the importance of international trade as a stimulus to economic growth, the results of these talks will help shape U.S. and worldwide economic prospects throughout the rest of this century.<sup>2/</sup> They may also affect the federal government's economic and budget policies for many years to come.

### WHAT IS AT STAKE?

The Uruguay Round comes at a time when governments are increasingly intervening in world trade to try to manage world markets for key products: in some cases allotting national market shares and inhibiting competition; and in other cases aggressively pursuing policies to enhance the competitiveness of particular industries. Many recent government actions--especially in the form of export subsidies, voluntary export restraints and other nontariff barriers to imports, and bilateral agreements--contradict the GATT principles that have successfully supervised international commerce since World War II. As government intervention increases worldwide, additional protective measures become more easily justifiable, especially for defensive purposes. Such a spiral of trade restraints could jeopardize world economic growth and the welfare of nations.

### Benefits of Free Trade

Economists have long extolled the benefits of free trade. Free trade is a positive-sum activity--those who trade do so because of mutual benefit.

2. A number of books and articles have been written recently that deal with the Uruguay Round of trade talks. Three that have been useful for the preparation of this report and which are not specifically quoted in the text are: Michael Aho and Jonathan Aronson, *Trade Talks; America Better Listen!* (New York: Council on Foreign Relations, 1985); Gary Hufbauer and Jeffrey Schott, *Trading for Growth: The Next Round of Trade Negotiations* (Washington, D.C.: Institute for International Economics, 1985); and William Cline, ed., *Trade Policy in the 1980s* (Washington, D.C.: Institute for International Economics, 1983).



Free trade expands the range of products available for consumption; broadens the markets for a country's producers; and increases a country's productivity by encouraging greater specialization.

International trade can be a stimulus to economic growth in both developed and developing countries. While larger countries can sometimes grow for a time by exploiting their own internal economic diversity and market size, as a rule a country cannot maintain high domestic economic growth rates for long without increasing its foreign trade. The importance of trade can be seen in the fact that the total volume of international trade increased by 1.6 percent for every 1 percent increase in world economic growth over the high-growth period 1950 to 1973. As worldwide economic growth began to stagnate in the period 1973 to 1984, this ratio fell to 1.1 percent.<sup>3/</sup>

Foreign trade has played an increasing part in the U.S. economy over the last 20 years. The ratio of imports or exports to total output (GNP) has almost doubled over the last two decades. Sectors such as agriculture, electronics, aircraft, certain types of machinery, and chemicals rely heavily on foreign markets for sales, while many domestic producers and consumers gain from the purchase of imports.

### Difficulties with Free Trade

The strong argument for free trade summarized above ignores the fact that free trade raises serious problems for governments. First, although free trade improves the overall standard of living in a country, the benefits are not distributed equally. The benefits are received by the most competitive productive groups, who are often already relatively well off, while the costs are borne by the least competitive groups. While gains to consumers more than outweigh losses to producers, their gains are normally spread thinly among many buyers. Moreover, if the shift of resources toward the more competitive sectors leads to unemployment during the adjustment process (and individual firms and workers lose some capital or skills specific to their former employment), then the private loss for some groups in the economy may be considerable. Unemployment introduces some social loss to the economy as a whole. Rather than attempting to compensate the losers by drawing upon the benefits of trade, governments often try to protect these weaker segments of the economy from foreign competitors at a net cost to the economy as a whole. Such protection generally forces consumers to pay

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3. Annual Report of the General Agreement on Tariffs and Trade, 1984/85, p. 18.

higher prices, and retards structural changes in the economy that can lead to higher productivity over time.<sup>4/</sup> There may be much less costly and more equitable ways to achieve these distributional goals than using trade policies.

Another problem arises when one country uses trade policies to gain advantage at the expense of its trading partners.<sup>5/</sup> Beggar-thy-neighbor policies can succeed if other countries do not retaliate. Retaliatory trade wars reduce the overall standard of living of all countries involved. A better course is to try to modify the unfair trading policies of other countries through negotiation rather than by retaliatory measures.

Government's Role in "Competitiveness". A new development in trade policy is the recognition that governments can fabricate comparative advantage. The traditional economic model explained trade flows between countries as the result of differences in resource endowments. But an increasing proportion of world trade now consists of the exchange of similar products between countries with comparable resource endowments and production technology. Success in this "intra-industry" trade relies more on such factors as economies of scale, business acumen, research and development, and product innovation than on differences in wages and capital stock. Maintaining market share becomes essential for the long-run viability of this type of trade. Since the margin of competitiveness is so narrow, traditional government policies such as education, scientific and research grants, and credit allocation can tip international competitiveness in favor of one country's producers against another's. The use of active government policy as a fundamental determinant of dynamic comparative advantage muddles the concept of "fair" trade policies. Just how far governments may or should go to support their nations' industries is an important question underlying many of the topics that will be discussed during these negotiations.

4. Instead of protecting industries from foreign competition, government can try to assist them in adjusting to changes in demand. Theoretically, adjustment programs lower many of the costs related to changes in trade flows, but such efforts in practice have met with mixed success. The economics of the adjustment process are obscure. For example, the many factors that influence a family's decision to change jobs or move to another region have not been adequately modeled. In fact, there is a shortage of information on even the magnitude of the problem. The most thorough examination of labor displacement is: U.S. Congress, Office of Technology Assessment, *Technology and Structural Unemployment: Reemploying Displaced Adults*, OTA-ITE-250 (February 1986).
5. Under certain conditions, optimal tariffs and other trade policies can be used to increase the welfare of one country relative to its trading partners, but the loss in welfare to its trading partners exceeds the gain to the country.

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THE NEGOTIATING ENVIRONMENT

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Multilateral negotiations allow countries to develop a common framework for approaching trade problems and afford the opportunity for reciprocal bargains that can make all parties better off. But negotiations often take several years, and outcomes are generally phased in over time. Multilateral talks rarely solve immediate trade conflicts.<sup>6/</sup> Instead, negotiations develop an enduring set of guidelines that moderate trade policy responses to various economic and political pressures, while gradually reducing restrictive trade policies already in place. GATT rules operate in a fashion similar to domestic laws that regulate social relationships. During periods of well being, GATT maintains a low profile and its negotiations encourage steady, but rarely dramatic, trade policy reform. During periods of economic stress, as is the case now, the GATT framework works to restrain governments from employing policies that they may later regret.

Previous rounds have induced developed countries to reduce dramatically tariffs on most manufactured goods imports: the average tariff rate on dutiable imports into developed countries is now around 5 percent, compared with much higher average tariff rates (almost 60 percent for the United States) when tariff liberalization talks first began in the early 1930s. The negotiations, especially the most recent Tokyo Round, have also begun the process of controlling the spread of nontariff barriers.

But a large proportion of international trade is still encumbered by various governmental policies. Many kinds of nontariff barriers have been erected that are not effectively controlled by GATT rules. These barriers are especially high in agriculture and in services. Even where GATT discipline is well established (for example, GATT rules designed to discourage dumping of manufactured products such as semiconductors), member governments have been increasingly unable to resolve their differences.

The broad task facing participants in the Uruguay Round, therefore, is to modernize the GATT framework of rules and procedures to cope better with the new realities of international trade, and to use these rules to achieve more liberal policies. This involves strengthening GATT authority where it already exists, and establishing GATT rules and enforcement pro-

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6. A major effort of the Uruguay Round, as discussed more fully in Chapter II, will be to enhance GATT's institutional ability to handle day-to-day trade disputes.

cedures for trade in nonmanufactured goods, for trade with developing countries, and for many nontariff trade barriers, none of which are now covered adequately by GATT. Better rules, though, must be implemented to be effective. Although previous rounds produced rules to govern the use of several nontariff barriers, compliance with them relied mainly on the good faith of members. GATT enforcement procedures are passive and weak. There is little evidence that these procedures have significantly liberalized trade. One specific task, therefore, will be to strengthen GATT's powers to enforce compliance. If experience with tariff reduction is a reliable guide, however, governments will be most likely to reduce trade barriers when a tangible concession by one country can be roughly offset by a reciprocal concession from a trading partner.

### Negotiating Procedures

Deliberations leading to the Punta del Este Declaration and the initial talks in Geneva have been dominated by jockeying to establish favorable positions for the start of the substantive negotiations. Partly as a compromise to achieve the broadest possible agenda, the Punta del Este agreement assigned most of the major items on the agenda to separate working groups.<sup>7/</sup> Although the mandate for many of these groups stresses rule-making and enforcement procedures, concessional bargaining to liberalize existing policies may occur in a number of cases. Negotiations in most groups, at least initially, are to be self-contained, thus limiting demands for reciprocal concessions across groups. This arrangement, by impeding cross-issue reciprocity, means that there will be less incentive to compromise, and thus less likelihood of major concessions on some key issues (see box). Activities in each group will be coordinated by a Trade Negotiations Committee consisting of representatives from various participating governments. How reciprocity is to be measured for a final agreement involving the many issues on the agenda has yet to be determined.

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7. All decisions in GATT must be approved by consensus. As more countries with diverse interests participate in GATT activities, consensus forces administration by compromise. To obtain the approval of several key developing countries to the Punta del Este Declaration, developed countries agreed to separate negotiations on services and manufactures trade. The developing countries demanded this in order to weaken any reciprocity link between increased access by developing countries to manufactured product markets in developed countries and reductions in trade barriers for service trade by developing countries.

### RECIPROCITY IN GATT NEGOTIATIONS

A hallmark of GATT negotiations is that each country enters voluntarily with the prospect that nothing must be yielded unless matched by reciprocal actions from its trading partners. Generally, each major negotiating team tries to achieve a roughly equivalent level of multilateral reciprocity in any final agreement, ensuring that each country can claim success when the deal is brought home. Designing a scoring method that tallies reciprocity across thousands of tariff classifications and numerous nontariff issues while remaining agreeable to the many negotiating parties is not a simple matter. Different measures of reciprocity may favor different countries. GATT does not specify how reciprocity is to be measured. Rather, the terms of reciprocity are an integral part of each negotiation process.

During the early rounds, when tariff reductions dominated the agenda, multilateral reciprocity was measured by the value of trade covered by tariff concessions, which were made on a most-favored-nation basis. In recent rounds, the average depth of tariff cut also was employed to measure reciprocity. The ultimate, but far too complex, criterion of equalizing gains in national welfare was at best indirectly relevant. By the Tokyo Round, data became available that allowed some countries to use economic models to estimate the effect of tariff concessions on trade flows, domestic output and employment, and economic welfare. More sophisticated reciprocity criteria, especially some allowing the summation of national benefits and costs over numerous nontariff agreements, may be used by many countries during the Uruguay Round.

Multilateral reciprocity was not used during the Tokyo Round negotiations concerning codes of conduct for nontariff barriers. Instead, reciprocity was defined independently for each code. Code reciprocity allowed a country to choose whether to sign a code without prejudicing its bargaining power in other parts of the negotiation. Limiting cross-issue reciprocity in this way made it easier for like-minded groups to enter into agreements. But it introduced two problems. Since the agreement required that signatories apply the discipline of the code only to trade with other signatories, it could potentially breach the principle of nondiscriminatory treatment, which has been a cornerstone of GATT. Also, parties often have unbalanced demands. One country may have little to gain by reciprocally reforming policies in one particular issue, but much to gain from concessions on another issue. By limiting trade-offs between issues, considerable bargaining leverage is wasted.



As in previous rounds, each country accepts a "standstill and rollback commitment." This commits negotiating governments not to initiate any new trade policies inconsistent with GATT rules over the course of the talks and to phase out by the end of the talks any trade policies currently in place that are not consistent with GATT rules. The purpose of the standstill commitment is to provide some order to the negotiations by stopping a country from altering its trade policies so as to enhance its bargaining power. In past rounds, however, both commitments served more as statements of intent than enforceable promises. Various countries introduced new protection during the Tokyo Round--the U.S. trigger price policy for steel, for example--and any policy rollback occurred as a result of reciprocal bargaining.

### The Economic and Political Environment

Trade issues are always politically sensitive, especially during periods of economic stress. Economic performance in one country is increasingly linked through international trade and monetary flows to activity in other economies. These linkages have recently been under great strain, as witnessed by large swings in exchange rates, prolonged weakness in world commodity markets, huge trade account imbalances, and the developing-country debt problem. World economic growth has been moderate at best over the last several years, and seems likely to continue that way.

Macroeconomic Policies and International Markets. Most of the instability in international markets can be explained by divergent macroeconomic policies in the United States, Japan, and the European countries.<sup>8/</sup> During the early 1980s, emphasis shifted abruptly toward deflationary monetary policies, as key central banks refused to accommodate the second round of oil price increases. Generally weak economic growth ensued. World commodity prices plummeted, precipitating a crisis for many developing countries that had borrowed heavily and that depended on commodity exports. At the same time, U.S. fiscal policies produced record federal budget deficits, and key foreign governments moderated their fiscal deficits. Together, these trends contributed to a substantial appreciation of the dollar and a massive increase in the U.S. merchandise trade deficit (see box). Although recent changes in macroeconomic policies have reversed these trends to some degree, the world economy is still faced with huge trade imbalances and prospects in most countries for no better than moderate growth.

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8. See Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1986-1990* (February 1985).



Foreign governments face the counterpart of the massive U.S. trade deficit problem. Many of them have relied on large trade surpluses with the United States to bolster their economies. High rates of unemployment exist throughout Europe. The rapidly growing Asian developing countries depend on trade surpluses with the United States, as do many debt-ridden Latin American countries. Japan, despite its enormous U.S. trade surplus, has lost its formerly high growth rate and is encountering problems characteristic of a mature economy. Improvement in the U.S. trade balance will therefore require a process of adjustment on the part of other countries, and the stresses of this adjustment will complicate bargaining positions in the Uruguay Round over the next several years.

Fundamental Shifts in Industrial Competitiveness. The industrial world has undergone far-reaching changes over the last several decades. Dramatic reductions in natural barriers to trade, such as communication and transportation costs, and the emergence of developing countries as competitive producers have increased the pace of international specialization. Many products from maturing and standardized industries in developed countries can be produced more cheaply in low-wage developing countries. Lower costs from large-scale production facilities encourage specialization even among developed countries, as in the case of high-technology products.

The resulting changes in trade flows have forced many economies to undergo major restructuring. Some workers, firms, and communities have improved their economic positions; others have lost. In almost all cases, though, there have been political repercussions.

Governments can seek to alter the situation with short-run policy responses, either unilaterally or through agreements with other countries. But such limited actions frequently do not resolve the causes of the root problem, and often create new problems with third countries or in other domestic sectors.<sup>9/</sup> Multilateral negotiations can take account more directly of the many interactions between different countries and different economic sectors that are inherent in the application of trade policies. But as more parties participate in the negotiations, a wider range of interests must be satisfied. The reciprocal concessions involved in multilateral negotiations may cause additional dislocation in some sectors of each economy.

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9. See Congressional Budget Office, *Has Trade Protection Revitalized Domestic Industries?* (November 1986).

### THE U.S. TRADE AND BUDGET DEFICITS

The record foreign trade deficits experienced by the United States have focused attention on what causes them and how they can best be reduced. There have been proposals to use trade policy to change the export-import balance, or alternatively to try to negotiate a solution during the Uruguay Round.

Trade policy has had little to do with the emergence of the huge trade deficits, and it cannot be expected to reduce them significantly. Governments can effectively use trade policy to alter the composition of imports and exports by favoring certain industries at the expense of other industries. But the large aggregate trade deficits were caused primarily by macroeconomic conditions, and can be substantially curtailed only by changing those conditions.

International trade at the product level depends primarily on the relative price of a domestic product relative to similar foreign products and the real income of potential consumers. When the price of a good falls relative to those of close substitutes, or when real income increases, the demand for that product increases. Demand for traded goods and services depends both on industry-specific factors, such as changes in technology or the use of trade policies, and on economywide factors, such as exchange rates and differences in inflation and real income growth among countries, including those disruptions caused by the developing-country debt crisis. Confusion sets in when the determinants of foreign trade at the product level are used to explain net trade flows between countries.

The foreign accounts of an economy are directly linked to its saving and investment relationships with other countries. These relationships can be characterized by three sets of ratios, each defined relative to GNP: domestic and foreign private saving as ratios of GNP in each country; domestic and foreign private investment as ratios of GNP in each country; and domestic and foreign government budget deficits as ratios of GNP. When these ratios diverge among countries, domestic or international forces must respond to bring the relationships underlying them back into equilibrium. Trade policy can affect the aggregate trade balance only if it can affect these macroeconomic constraints--that is, only if it can alter the net capital flow into an economy.

Each of the three macroeconomic constraint ratios may change in response to various economic forces. Recent years have seen a dramatic increase in the U.S. government budget deficit ratio coupled with significant, although less dramatic, declines in many foreign government budget deficit ratios. The large U.S. government deficits expanded U.S. demand for investment funds (savings) at the same time as many foreign governments were creating new excess supplies of savings by reducing their

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### THE U.S. TRADE AND BUDGET DEFICITS

deficits. In a closed economy, excess domestic demand for savings would cause interest rates to rise, crowding out some domestic investment and encouraging new savings (and less consumption) until a new balance would be achieved. But in the current environment, where international financial transactions costs are negligible and exchange rates are flexible, the excess demand for savings in the United States attracted massive net inflows of financial capital from abroad, tempering any increase in U.S. interest rates. The increase in demand for dollars as foreigners purchased dollar-denominated assets raised the value of the dollar, causing the prices of U.S. goods and services to increase relative to foreign goods and services. To satisfy the balance of payments constraint, the exchange rate had to increase by enough to force the U.S. trade (current account) deficit to equal the net capital inflow from abroad. In essence, access to international markets shifted the domestic adjustment burden of the U.S. budget deficits away from interest-sensitive segments of the economy to traded-goods segments.

Government budget deficits are not the only cause of trade deficits. Divergences in private savings and private investment ratios across countries can also induce changes in international trade and capital flows. U.S. calls for more vigorous foreign growth are aimed at raising foreign private investment, which would both sop up foreign savings and increase foreign demand for U.S. goods and services. A major objective of the effort to relieve the developing-country debt crisis is to reduce pressure on the U.S. trade balance. The debt crisis, manifested mostly in Latin America, has forced these countries to limit imports severely, and to expand exports, in order to service their foreign debts. Private investment ratios in these countries have fallen, causing economic growth to deteriorate. The economic disruption associated with the debt crisis has been aggravated by significant private capital outflows from many of these countries, forcing them to produce even higher merchandise trade surpluses. Since the United States is the major trading and financial partner for most of the debt-constrained countries, the debt crisis has been a major contributor to the U.S. merchandise trade deficit.

Recognition of the myriad factors affecting international trade and capital flows has led some to call for expanding the scope of international economic cooperation by conducting parallel negotiations that would seek to coordinate macroeconomic policies, and thus stabilize exchange rates; remedy the debt crisis; and improve the conduct of trade policy. Such coordinated actions face formidable obstacles. Although GATT trade talks play a vital role in providing conditions that are conducive to expanding international trade and economic growth over time, they cannot be expected to offer a solution to the current U.S. trade deficit crisis.

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## THE URUGUAY ROUND AND THE CONGRESS

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The nature of the new trade talks raises a number of important issues for the Congress. Most immediately, Congressional authority for the President to negotiate tariff reductions expired in 1982 and authority for nontariff barrier negotiations, with an expedited approval procedure, expires in January 1988. The bills now before the Congress would extend the President's negotiating authority. Such an extension will be necessary before a Uruguay Round agreement is completed. In the past, the Congress has provided the President with authority to reduce tariffs up to a specified amount over a fixed period of time without further Congressional approval. Authorizing bills have also indicated the priorities of the Congress for the negotiations. The Congress has always retained the right of final review for nontariff agreements, but does so on a fast-track basis--meaning that no amendments are allowed, and that a final vote on all the provisions as a package must be conducted within 90 days of submission.<sup>10/</sup> Since the actual negotiating process is largely controlled by the Administration, and since subsequent changes are limited by the fast-track procedure, the authorizing bill will represent an important opportunity for the Congress to influence the outcome of the Uruguay Round.

Because the Uruguay Round will focus more than ever before on the impact of broad national policies on foreign trade, the final agreements reached during the talks may require changes in these national policies and may limit future Congressional policy options. For example, any major reform in European agricultural policies is likely to involve a demand for reciprocal reforms in U.S. farm policies. Reductions in barriers to services trade by foreign governments may require lower U.S. protection for manufactured goods such as apparel and steel; or they may require the United States to change immigration laws or reorder traditional state and federal responsibilities over the regulation of some services. Agreements limiting the subsidizing or "targeting" of industries may impede science and competitiveness policies; Sematech, the proposed consortium of semiconductor producers, for example, may be jeopardized by such an agreement. In any event, closer attention will be paid to the foreign-trade ramifications of national policies, both in the United States and abroad.

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10. The crafting of a final GATT agreement involves a series of compromises between countries toward reaching an acceptable level of final reciprocity. In order to limit the unraveling of this process, fast-track authority prevents the Congress from changing the specifics of any part of the agreement.

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This report is designed to provide an overview of the key factors affecting the role of the United States in the Uruguay Round of multilateral trade negotiations and to examine how these talks may influence domestic policy choices. It surveys the role of GATT in international trade relations, placing the Uruguay Round in perspective as the most recent stage of an ongoing process of trade liberalization. It then examines the potential effects of further liberalization on four key sectors of the U.S. economy: high-technology industries, agriculture, mature industries, and services. A study of these sectors shows some of the constraints upon the U.S. negotiating team. Some sectors may gain, and others may lose during multilateral negotiations. These distributional consequences of multilateral trade policy negotiations, though, are not likely to outweigh the overall benefits to the national interest resulting from a more open world trading system.





## CHAPTER II

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# GATT NEGOTIATIONS IN PERSPECTIVE

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Every round of multilateral trade negotiations represents a milestone in an evolving process of trade policy liberalization. The agenda and procedures for a new round of talks, therefore, are based on the legacy of previous rounds. This chapter surveys the history of the General Agreement on Tariffs and Trade (GATT), concluding with an overview of the key agenda items established for the Uruguay Round.

Over the last four decades, GATT has played a key role in helping developed countries reduce significantly their tariffs on imports: the average U.S. tariff on dutiable imports has fallen from almost 60 percent following the Smoot-Hawley Tariff Act in 1930 to around 5 percent currently. Partly because of this success, though, nontariff policies have replaced tariffs as the prevalent form of protection throughout the world. Member countries have not provided GATT with the tools to liberalize nontariff barriers to trade. This often reflects fundamental disagreements among key governments over what are acceptable nontariff trade policies--disagreements that are aggravated because many controversial nontariff barriers are directly linked to national policy packages aimed primarily at domestic instead of international policy goals. Whether the Uruguay Round can successfully prod governments to reduce such barriers depends fundamentally on the willingness of key governments, including some advanced developing countries, to reform national policies that are harmful to international trade.

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## THE GENERAL AGREEMENT ON TARIFFS AND TRADE

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GATT is both a multilateral agreement (the General Agreement) and a corresponding international organization (the GATT Secretariat). Currently 93 countries, accounting for over four-fifths of world trade, are members of GATT, and another 31 countries abide by its rules. <sup>1</sup>

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1. The Soviet Union, Taiwan, and the Peoples Republic of China are the only major trading countries that are not members of GATT. The Peoples Republic has applied for membership and will be allowed to participate on an equal basis in the Uruguay Round. A recent application by the Soviet Union was rejected by GATT.

The General Agreement--including not only the original articles but additions to them, as well as a number of protocols and the tariff schedules of each member country--is a legal document that spells out the underlying principles and operating rules agreed upon by the contracting parties to regulate their conduct of trade policy.<sup>2/</sup> Encouraging growth in international trade based on economic factors rather than on government policies is the unifying premise of the General Agreement. The GATT Secretariat, which acts on behalf of the contracting parties and their Council of Representatives, helps to administer the General Agreement by sponsoring multi-lateral trade negotiations, by monitoring trade flows and trade policies, and by hosting consultations to help countries resolve trade disputes.

GATT has little independent power. Rather, it provides a forum in which governments can reconcile trade policy conflicts, as well as a set of principles that the members have agreed to be mutually beneficial. It plays a passive role, reinforcing the desires of its members but rarely initiating action. When member governments agree on the need for policy reform, GATT helps facilitate the reform. But GATT cannot coerce countries to change their policies against their will. Member countries have yet to agree to yield sovereignty over national policy actions to an international body.

Although the General Agreement clearly states certain general principles, so many exceptions are allowed in qualifying articles that a wide-range of policy actions--many of them contradicting the spirit, if not the letter, of the GATT principles--can be justified. GATT enforcement procedures rely mainly on suasion, ultimately depending on good faith and the fear of retaliation.<sup>3/</sup>

### The Origin of GATT

GATT originated in 1947 as a relatively minor element of an ambitious post-war plan to promote peace and economic well-being by limiting political and economic tensions among countries. The World Bank and the International

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2. See Kenneth W. Dam, *The GATT: Law and International Economic Organization* (Chicago: University of Chicago Press, 1970), for a detailed examination of the General Agreement.
  3. Reciprocity, a cornerstone of GATT, is double edged--one country can offer a trade policy concession in return for an equivalent concession by its trading partner, or a country can implement a trade barrier in retaliation for an increase in another country's trade barriers. GATT has been much more successful in encouraging the former than in discouraging the latter.

Monetary Fund were designed to address developmental and international monetary problems. An International Trade Organization (ITO) was proposed to regulate trade relations among countries and to encourage trade liberalization. The General Agreement was devised as a provisional document to hasten the start of multilateral tariff negotiations while the relevant governments were ratifying the ITO charter. Despite the support of President Truman, however, the charter encountered opposition in the U.S. Congress and failed to win enough votes for ratification. But Congressional approval was not required for the General Agreement, which Truman approved through an Executive Agreement. Most of the ITO charter dealing with commercial trade policy was incorporated into the General Agreement, and it has remained the internationally accepted standard for the conduct of trade policy.

As a weak substitute for the envisioned ITO, a GATT Secretariat, with a very small staff, was created to oversee the General Agreement and to manage multilateral trade negotiations. Since this modest inception, the prestige and responsibility of the GATT Secretariat (now consisting of over 300 employees) has grown steadily as it has led the drive to liberalize trade policies.

#### Fundamental Principles of the General Agreement

Literally, the General Agreement is a detailed legal document that defines the responsibilities and operating rules agreed upon by member governments to guide their conduct of international trade relations (see box). As stated in its preamble, the goal of the General Agreement is to raise living standards through "reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce."

Four key principles underlie the General Agreement:

- o Member countries should work to lower trade barriers in general, and to eliminate the use of quotas in particular.
- o Any barrier to trade should be applied on a nondiscriminatory basis to all member countries (most-favored-nation treatment).
- o Once a tariff concession is made, it cannot later be rescinded without compensating affected trade partners. Also, other forms of protection cannot be employed to circumvent the effect of the concession.

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### THE GENERAL AGREEMENT IN BRIEF

The Preamble of the General Agreement proposes to raise living standards by reducing trade barriers and, in particular, by eliminating discriminatory trade practices. Part I states the basic principle of nondiscrimination and legally binds members to comply with their tariff concessions. Part II calls for the elimination of nontariff barriers, subject to several qualifications. Part III contains procedural rules, most importantly condoning the formation of free trade areas. Part IV, added in 1965, addresses the special needs of the developing countries.

#### Part I

**MFN.** Article I provides that a tariff on an imported product should be applied equally to all members. This affirmation of nondiscrimination is called most-favored-nation (MFN) treatment.

**Binding tariff schedules.** Article II legally binds members to their tariff concessions. It states that tariffs should not be increased above the rates in each country's tariff schedule.

#### Part II

**National treatment.** Article III prohibits members from circumventing tariff concessions by employing nontariff policies to offset the effect of a tariff reduction. National treatment requires that internal taxes apply equally to domestic and imported products and that regulations treat imported goods "no less favorably" than similar domestic goods.

**Customs regulations.** Articles V and VII through X curb customs procedures that impede imports. Such activities include rules of transit (article V), customs valuation (article VII), customs fees and formalities (article VIII), and marks of origin (article IX). Article X states that all laws and regulations regarding trade should be formulated and applied in a transparent manner, which requires public disclosure and the uniform and impartial administration of trade laws.

**Antidumping and countervailing duties.** Article VI defines dumping, states that both dumping and injury to domestic producers must be proved in order to merit an antidumping duty remedy, and specifies that antidumping duties should not exceed the dumping margin. It provides similar rules for the countervailing duty remedy to offset foreign government subsidies.

**Quantitative restrictions.** Article XI calls for the general elimination of quantitative restrictions (QRs) to trade, subject to several qualifications. Most importantly, QRs can be used to safeguard the balance of payments (article XII) and to provide temporary escape clause relief for domestic industries (article XIX). Developing countries can also use QRs to further developmental goals (article XVIII and Part IV). Article XIII states that QRs, when employed, must be applied on a nondiscriminatory basis, with some exceptions listed in article XIV. Article XV regulates the use of currency controls to evade QR restrictions, and coordinates GATT and IMF interests during balance-of-payments emergencies.

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Part II  
(Continued)

**Subsidies.** Article XVI discourages the use of subsidies in general, and calls for the elimination of export subsidies for nonprimary products in particular. Export subsidies for primary products should not cause a country to achieve more than an equitable share of world export trade in that product.

**State-owned enterprises.** Article XVII asserts that state-owned enterprises should choose among potential buyers and sellers according to normal business considerations, especially in terms of prices, quality, and procurement.

**Government assistance in developing countries.** Article XVIII affords developing countries exemptions to most of the requirements of the General Agreement, subject to rigorous criteria. Because of its strict standards, these exemptions have rarely been employed. Instead, developing countries have justified their use of policies such as nontariff barriers and export subsidies as safeguards for balance-of-payments problems.

**Escape clause and other exceptions.** Articles XIX through XXI provide additional exceptions to the general rules. Article XIX, the escape clause, allows countries to protect, through withdrawal of concessions or other measures, domestic producers from injury resulting from increases in imports. Articles XX and XXI identify other essentially noneconomic justifications for trade restrictions, such as for national security protection.

**Consultation and dispute settlement.** Articles XXII and XXIII lay out the dispute settlement process of GATT. Consultation between countries is emphasized, but panels of experts can also be asked to review cases on a nonbinding basis.

Part III

**Procedural issues.** Procedural and other administrative matters are taken up in articles XXIV through XXXV. Most notably: article XXIV addresses how free trade areas are to be established; article XXVIII sets rules for modifying tariff schedules, including a call for periodic tariff negotiations; and article XXXIII establishes criteria for accession of new members.

Part IV

**Trade and development--treatment of developing countries.** Article XXXVI acknowledges the special problems confronted by developing countries, and states that developed countries should not expect reciprocity from developing countries. Article XXXVII contains a statement of the intent of developed countries to encourage developing country exports by unilaterally lowering trade barriers, and article XXXVIII includes encouragement to stabilize and improve market conditions for primary products.

Sources: General Agreement on Tariffs and Trade; International Trade Commission; and Congressional Budget Office.

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- o Trade conflicts should be settled by consultation whenever possible, using as a guide a set of codified and mutually accepted rules for the conduct of trade.

Trade Liberalization and the Elimination of Quotas. The General Agreement has always championed an open trading system. Consequently, it has favored tariffs over quotas, and has sought to reduce tariffs over time. Quotas are discouraged for two reasons: by limiting import quantities, their protective effect can vary as market conditions change; and their impact on prices cannot be directly observed. Their lack of "transparency" makes it difficult to measure the protective impact of a quota and to compare its effect with trade policies applied in other sectors or countries.

Most-Favored-Nation Treatment. Tariffs, or any other form of protection, should be applied on a nondiscriminatory basis across all member countries. Each country should be treated as a "most-favored nation." Nondiscrimination insures that imports will be supplied at the lowest cost by the most competitive foreign suppliers. If domestic suppliers must be protected from foreign competition, the form of that protection should not introduce additional distortions to trade. Discrimination may lead to wasteful trade diversion; it also complicates trade negotiations and enhances the possibility of retaliation.<sup>4</sup> Unconditional most-favored-nation treatment reflects the ideal of full nondiscriminatory treatment of all import suppliers. It precludes bilateral and preferential agreements that favor one or a group of countries.

Insuring the Integrity of Tariff Concessions. To legitimize trade negotiations, governments must not be able to circumvent the effect of tariff reductions they have agreed to during reciprocal bargaining. The General Agreement confronts this in two ways. First, during tariff negotiations, countries promise to bind tariff rates for particular products at a certain level--that is, promising not to increase those tariff rates in the future. If a country decides to increase a tariff above the bound rate, it must notify GATT and is liable for compensation to affected trading partners. Second, no other type of government policy can be employed to offset the impact of

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4. A policy is trade diverting if, in favoring one country over another, it diverts trade from low-cost to higher-cost producers. Under competitive conditions, consumers in the home market are not affected by trade diversion in the short run since landed import prices remain the same, but resources are misallocated, inhibiting worldwide growth in the long run. Where policies stimulate trade, policies can be trade creating, improving both resource allocation and consumer benefits. Trade suppression results when policies reduce total trade flows, injuring consumers and misallocating resources.



the concession. The General Agreement requires national treatment of imported goods, meaning that a country's internal taxes must be applied equally to both imports and domestic goods and that its regulations must treat imports "no less favorably" than similar domestic products. Additionally, the General Agreement discourages the dilution of another country's tariff schedule by the use of government subsidies or through actions by private firms (dumping) that cause exports to be sold at less than normal prices. Effectively, countries are not allowed to gain through export subsidies or nontariff barriers to imports what they could not gain through tariff negotiations.

Dispute Settlement. GATT plays a passive enforcement role, relying primarily on the good faith of its members to abide by its rules. Instead of actively policing compliance, GATT responds only to complaints initiated by members. When trade policy disputes arise, the GATT dispute settlement process encourages members to employ consultation procedures to reconcile the problem among themselves, using GATT rules as a guideline. If consultation fails, disputants have the right to call together a panel of third-party representatives for a ruling on the case. Although the panel ruling is not legally binding, it can be made binding if approved by the GATT Council. If all else fails, a party can submit an argument to the GATT Council for approval of retaliatory action. GATT Council approval of rulings and retaliatory actions requires a unanimous vote. As a result, any ruling or retaliatory action can be vetoed by any party to a dispute. Thus, there is currently no coercive enforcement mechanism short of sanctioned retaliation, and even this can be vetoed by the offending party.<sup>5/</sup>

### Exceptions to the Principles of the General Agreement

As in any general body of rules, some exceptions are needed to handle special circumstances. When the General Agreement was conceived in 1947, exceptions to the basic principles were made to allow countries to join GATT without immediately negating existing domestic policies or limiting

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5. Rulings by GATT, although generally not enforceable, carry some weight as citations of improper behavior. For example, GATT ruled that the U.S. program of tax relief for exports, the Domestic International Sales Corporation (DISC), violated GATT rules. Although the United States refused to acknowledge the validity of the GATT ruling, after a long process it replaced DISC with a new program - the Foreign Sales Corporation (FSC) - that conforms with GATT. For a detailed discussion of the history and structure of the FSC, see Joint Committee on Taxation, *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984* (December 31, 1984), pp. 1037-1070.

key future policy options. Several additional exceptions have been added. These exceptions have now become so numerous and broad-reaching that, in practice, few trade policy targets are hindered by the General Agreement.<sup>6/</sup>

Exceptions to the Trade Liberalization Principle. GATT's goal of trade liberalization in general and the elimination of quotas in particular is limited to trade in manufactured goods, excluding textiles and apparel, among developed countries that do not have serious balance-of-payments problems and in industries where imports do not cause serious injury to domestic producers. Various national policies with foreign trade ramifications, such as health and safety regulations, and policies justified by national security interests, are also excepted.

Trade coverage is limited because the General Agreement does not cover trade in services and intellectual property, nor trade related to foreign investment regulations and performance requirements. The General Agreement, weakened by a 1955 waiver that permitted broad U.S. agricultural import quotas, allows nontariff barriers for many primary products. Additionally, a multilateral system of import quotas on textiles and apparel trade (the Multifiber Arrangement) has been permitted, and voluntary export restraints and orderly marketing agreements are not formally covered. Developing countries are excluded from most of the rigor of the GATT principles in recognition of their special need to fashion self-serving policies that may speed development. Safeguards permit the use of quantitative restrictions during balance-of-payments emergencies and for temporary protection of sectors that have been seriously injured by increases in imports (the escape clause).<sup>7/</sup>

Exceptions to the Most-Favored-Nation Principle. The General Agreement sanctioned discriminatory actions by permitting countries to continue colonial preference schemes that existed before GATT's establishment; to

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6. As explained in more detail later in this chapter, codes of conduct were established during the Tokyo Round to fortify GATT rules and procedures for several types of nontariff policies. In practice, though, these codes have not significantly strengthened GATT's role.
  7. Safeguards were established initially to accommodate the widespread use of these policies following World War II. Except for the United States, quotas were used liberally to conserve and allocate foreign exchange during postwar balance-of-payments emergencies. The escape clause was included mainly at U.S. insistence, since U.S. law required the government to show that tariff concessions would not cause serious injury to domestic producers.

develop programs for preferential tariff treatment for developing countries (such as the Generalized System of Preferences in the United States); and to form free-trade areas or customs unions such as the European Economic Community. The Multifiber Arrangement uses bilateral quotas rather than a nondiscriminatory global import quota. In addition, the safeguard actions mentioned above often employ discriminatory remedies, as exemplified by the recent rash of voluntary export restraints and orderly marketing agreements applied by several countries, especially the United States.<sup>8/</sup>

Exceptions to Defending the Integrity of Tariff Concessions. GATT's weak restrictions on subsidies and other nontariff barriers allow countries to offset the effects of tariff concessions. Increasingly, escape clauses and unfair trade actions are used to this end.

Ineffective Dispute Settlement Procedures. GATT's enforcement procedures lack clout. It has very limited authority to penalize governments that break the rules. Moreover, its dispute settlement procedures are notoriously slow, often taking several years for a final, yet still nonbinding, ruling. When good-faith compliance to GATT rules fails, it is the threat of retaliation, not the GATT dispute settlement process, that looms as the main restraint to abuse.<sup>9/</sup>

### Rules, Procedures, and Nontariff Barriers

As Kenneth Dam has pointed out, an effective body of law is more than "a set of substantive rules. It is also a set of procedures, adapted to the subject matter and designed to resolve disputes that cannot be foreseen at the moment when those procedures are established."<sup>10/</sup> For a legal system to be

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8. The United States has recently negotiated voluntary export restraints (VERs) for steel, autos, and machine tools. Orderly marketing arrangements (OMAs) were used by the United States during the 1970s for non-rubber footwear and televisions. Although not all of these policies were directly related to a safeguard action, each policy did set different quota limits for different countries. Many European countries have also employed these types of policies; most notably, many European countries have a VER on automobiles with Japan. VERs and OMAs as trade policy options are not currently covered by GATT rules, but they clearly violate the spirit of the GATT principles.
  9. For a more thorough examination of this issue, see U.S. International Trade Commission, *Review of the Effectiveness of Trade Dispute Settlement Under the GATT and the Tokyo Round Agreements*, Publication 1793 (Washington, D.C., December 1985).
  10. Kenneth W. Dam, *The GATT: Law and International Economic Organization*, p. 4.

effective, rules and procedures must be compatible, and adaptable to circumstances. Strong rules limit procedural flexibility, but weak rules that vaguely differentiate permissible activities hamper the most vigilant enforcement efforts.

The General Agreement is not a set of strong, substantive rules and viable enforcement procedures. Rather, it provides a loose conceptual and procedural framework that encourages countries to identify common interests so they will have a basis for entering into mutually advantageous agreements. In retrospect, a weak but flexible GATT has proved quite successful in promoting tariff reduction and integrating a broad range of countries into the world trading system. At the same time, frustration has mounted over the inability of GATT to control nontariff barriers (NTBs), which are replacing tariffs as the primary mode of protection.

Nontariff barriers introduce a number of new problems for GATT. They are inherently less transparent than tariffs, making it harder to identify those government policies that restrain trade. Even when NTBs are applied in a straightforward manner, as in the case of import quotas, their protective impact cannot be measured directly. To make NTBs more transparent, it will be necessary to develop common techniques for reporting and quantifying NTBs that are consistently applicable across products, countries, and types of trade policies.<sup>11/</sup> Before liberalization of NTBs can even be addressed, considerable effort will be needed just to place them on a commonly accepted tariff equivalent basis. Transparency can be achieved most quickly by converting all nontariff barriers to ad valorem tariffs (or in some cases by auctioning the quota rights).<sup>12/</sup>

Rules must also be developed, and adapted over time, to delineate national policies that constitute nonpermissible trade barriers. This task is complicated by several factors. As economies become increasingly open to international influences, a broader range of national economic policies influence foreign trade flows. But most countries do not want to invite international scrutiny of what they consider to be domestic policies. Moreover,

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11. As examined more fully in the chapter on agriculture, producer and consumer subsidy equivalents have been estimated for many countries' nontariff agricultural policies in an attempt to achieve greater transparency.
  12. See Everett M. Ehrlich and Raymond C. Scheppach, *New Directions in Economic Policy: An Agenda for the 1980s* (New York: Praeger, 1984), pp. 183-188, for an overview of the role of transparency in the trade liberalization process.

many regulations that affect trade, especially those related to services, are controlled not by national governments but by state, local or provincial governments. Defining "fair trade," then, places a premium on rules. Without more concrete rules, cheating cannot be well defined and therefore cannot easily be corrected.

But even the most precise rules must be backed by suitable enforcement procedures and penalties to be effective. Otherwise the principal sanction will be the threat of retaliation, which inherently favors the strong over the weak. Current GATT procedures have not dealt adequately with enforcement of NTB rules. Designing more effective enforcement procedures will be complicated by the lack of transparency inherent to NTBs and because strong international enforcement ultimately infringes on national control over key policy actions. Thus, a major focus of the Uruguay Round will be the difficult task of sharpening and extending GATT rules and procedures that deal with a wide array of nontariff barriers.

#### PREVIOUS ROUNDS: STAGE-BY-STAGE LIBERALIZATION

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The Uruguay Round is the eighth GATT-sponsored multilateral trade negotiation since World War II and the first since the conclusion of the Tokyo Round in 1979. Previous negotiations produced steady, if rarely dramatic, progress toward the goal of trade liberalization. Over time, import tariffs in developed countries have been significantly reduced and initial attempts have been made to regulate the use of nontariff barriers. The agenda for the Uruguay Round reflects the accomplishments, and failures, of these previous rounds.

##### The Early Rounds

The Smoot-Hawley Tariff Code of 1930 raised the average tariff rate on U.S. dutiable imports to almost 60 percent (Table 1).<sup>13/</sup> Most major U.S. trading partners quickly retaliated by raising their own tariffs, further stifling world trade. With the change in administration in 1933, the United States reversed policies. The Reciprocal Trade Agreements Act of 1934 broke new ground by shifting most authority over tariffs from the Congress

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13. For a good overview of U.S. trade policy through the Kennedy Round, see John W. Evans, *The Kennedy Round in American Trade Policy: The Twilight of the GATT?* (Cambridge: Harvard University Press, 1971).



TABLE 1. U.S. TARIFF RATES, 1789 THROUGH 1984  
(In millions of dollars and percentages)

| Year  | Imports | Percent<br>Duty-Free | Calculated<br>Duties | Ratio of<br>Calculated Duties <sup>a/</sup> |                     |                    |
|-------|---------|----------------------|----------------------|---------------------------------------------|---------------------|--------------------|
|       |         |                      |                      | Total<br>Imports                            | Dutiable<br>Imports | Federal<br>Revenue |
| 1789- |         |                      |                      |                                             |                     |                    |
| 1791  | n.a.    | n.a.                 | 4                    | n.a.                                        | n.a.                | 99.5               |
| 1800  | 91      | n.a.                 | 9                    | 9.9                                         | n.a.                | 83.7               |
| 1810  | 85      | n.a.                 | 9                    | 10.6                                        | n.a.                | 91.5               |
| 1820  | 74      | n.a.                 | 15                   | 20.3                                        | n.a.                | 83.9               |
| 1830  | 50      | 8.0                  | 28                   | 57.3                                        | 61.7                | 88.2               |
| 1840  | 86      | 48.8                 | 15                   | 17.6                                        | 34.4                | 69.3               |
| 1850  | 164     | 9.8                  | 40                   | 24.5                                        | 27.1                | 91.0               |
| 1860  | 336     | 20.2                 | 53                   | 15.7                                        | 19.7                | 94.9               |
| 1870  | 426     | 4.7                  | 192                  | 44.9                                        | 47.1                | 47.3               |
| 1880  | 628     | 33.1                 | 183                  | 29.1                                        | 43.5                | 55.9               |
| 1890  | 766     | 33.7                 | 227                  | 29.6                                        | 44.6                | 57.0               |
| 1900  | 831     | 44.2                 | 229                  | 27.6                                        | 49.5                | 41.1               |
| 1910  | 1,547   | 49.2                 | 327                  | 21.1                                        | 41.6                | 49.4               |
| 1915  | 1,648   | 49.2                 | 206                  | 12.5                                        | 33.5                | 30.1               |
| 1920  | 5,102   | 61.1                 | 326                  | 6.4                                         | 16.4                | 4.8                |
| 1925  | 4,176   | 64.9                 | 552                  | 13.2                                        | 37.6                | 14.5               |
| 1930  | 3,114   | 66.8                 | 462                  | 14.8                                        | 44.7                | 14.1               |
| 1932  | 1,325   | 66.9                 | 260                  | 19.6                                        | 59.1                | 16.3               |
| 1935  | 2,039   | 59.1                 | 357                  | 17.5                                        | 42.9                | 9.0                |
| 1940  | 2,541   | 64.9                 | 318                  | 12.5                                        | 35.6                | 5.9                |
| 1945  | 4,098   | 67.1                 | 381                  | 9.3                                         | 28.2                | 0.7                |
| 1950  | 8,743   | 54.5                 | 522                  | 6.0                                         | 13.1                | 1.0                |
| 1955  | 11,337  | 53.3                 | 633                  | 5.6                                         | 12.0                | 0.9                |
| 1960  | 14,650  | 39.5                 | 1,084                | 7.4                                         | 12.2                | 1.2                |
| 1965  | 21,283  | 34.9                 | 1,643                | 7.7                                         | 11.9                | 1.2                |
| 1970  | 39,756  | 34.9                 | 2,584                | 6.5                                         | 9.9                 | 1.2                |
| 1975  | 96,516  | 32.2                 | 3,780                | 3.9                                         | 5.8                 | 1.3                |
| 1980  | 244,007 | 43.8                 | 7,535                | 3.1                                         | 5.7                 | 1.4                |
| 1984  | 322,990 | 31.9                 | 12,042               | 3.7                                         | 5.5                 | 1.4                |

SOURCE: Stephen L. Lande and Craig VanGrasstek, *The Trade and Tariff Act of 1984: Trade Policy in the Reagan Administration* (New York: Lexington Books, 1986), p. 4; adapted from Bureau of the Census, *Statistical Abstract of the United States* (various editions).

n.a. = not available.

a. Trade-weighted average tariff rates can change not only because of changes in tariff policy, but also as the composition of imports shifts among products with different tariff rates and as inflation lowers the ad valorem equivalent rate of specific tariffs. Also, trade-weighted averages of tariffs are biased downward because trade flows tend to be lower where the protective effect of a tariff is highest.



to the President, who was authorized to cut most rates by up to 50 percent in exchange for reciprocal cuts by major trading partners. All tariff cuts were to be extended on a "most-favored-nation" basis. The Presidential authority was limited, though, by an agreement with the Congress to negotiate tariff cuts on a product-by-product basis, with no tariff to be cut if this threatened serious injury to a domestic industry. Over the next 11 years, a series of bilateral negotiations with major U.S. trading partners succeeded in reducing the average Smoot-Hawley tariff by about one-third.

The first GATT-sponsored multilateral trade negotiation (MTN) convened in 1947. Although most of the negotiations remained bilateral and product-by-product in nature, the interplay among the many partners resulted in significant further reductions in tariffs.<sup>14/</sup> On average, the existing U.S. tariff structure (scheduled rates) was cut by about one-third (see Table 2, which includes only the impact of various negotiations on scheduled tariff rates). By 1950, the average tariff on dutiable imports had fallen by about 75 percent compared to Smoot-Hawley tariff levels (see Table 1, which includes the impact of all factors on average realized tariff rates). Although much of this drop can be attributed to the various tariff negotiations, changes in the composition of imports and the impact of inflation on specific tariffs also helped to lower realized tariff rates over this period.

### The Kennedy Round

GATT sponsored four more MTNs over the next 15 years. Little additional tariff reduction was accomplished during this period, partly because of political pressures in the United States against further cuts, but also because considerable energy was spent on forming the European Community (EC) and integrating it into the world trading system. Significant progress

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14. In these early negotiations, the United States generally made larger cuts than did its trading partners. Often, the main concessions by others were to bind their rates at then current levels, rather than reducing them. The United States accepted this as reciprocal treatment because many U.S. tariffs were considerably higher than those of its trading partners at the time. In fact, in many cases, U.S. tariffs were so high that reductions had little impact on trade flows. Since the United States ran a trade surplus in almost every major industrial sector following World War II, it had little to lose and much to gain in both economic and political terms by encouraging worldwide trade and economic growth. The lack of a strong leader in the current international political environment may retard liberalization efforts. See Robert E. Baldwin, "The Changing Nature of U.S. Trade Policy since World War II," in Robert E. Baldwin and Anne O. Krueger, eds., *The Structure and Evolution of Recent U.S. Trade Policy* (Chicago: University of Chicago Press, 1984).

TABLE 2. DUTY REDUCTIONS SINCE 1934 UNDER  
THE U.S. TRADE AGREEMENTS PROGRAM  
(In percents)

| GATT Conference                     | Proportion<br>of Dutiable<br>Imports<br>Subjected to<br>Reductions | Average<br>Cut in<br>Reduced<br>Tariffs | Average<br>Cut in<br>All Duties | Remaining Duties<br>as a Proportion<br>of 1930 Tariffs <sup>a</sup> |
|-------------------------------------|--------------------------------------------------------------------|-----------------------------------------|---------------------------------|---------------------------------------------------------------------|
| Pre-GATT,<br>1934-1947              | 63.9                                                               | 44.0                                    | 33.2                            | 66.8                                                                |
| First Round,<br>Geneva, 1947        | 53.6                                                               | 35.0                                    | 21.1                            | 52.7                                                                |
| Second Round,<br>Annecy, 1949       | 5.6                                                                | 35.1                                    | 1.9                             | 51.7                                                                |
| Third Round,<br>Torquay, 1950-1951  | 11.7                                                               | 26.0                                    | 3.0                             | 50.1                                                                |
| Fourth Round,<br>Geneva, 1955-1956  | 16.0                                                               | 15.6                                    | 3.5                             | 48.9                                                                |
| Dillon Round,<br>Geneva, 1961-1962  | 20.0                                                               | 12.0                                    | 2.4                             | 47.7                                                                |
| Kennedy Round,<br>Geneva, 1964-1967 | 79.2                                                               | 45.5                                    | 36.0                            | 30.5                                                                |
| Tokyo Round,<br>1974-1979           | n.a.                                                               | n.a.                                    | 29.6                            | 21.2                                                                |

SOURCE: Real Phillipe Lavergne, *The Political Economy of U.S. Tariffs* (Ph.D. thesis, University of Toronto, 1981).

n.a. = not available.

a. These percentages do not take account of the effects of either structural changes in trade or of inflation on the average tariff level.

on lowering tariffs was accomplished in the sixth GATT-sponsored MTN, the Kennedy Round, which lasted from 1964 to 1967. Not only were duties cut on average by 36 percent, but the cuts were spread over the broadest set of products to date--some cut in tariff being made on almost 80 percent of all dutiable imports. Much of the success of this round is attributable to the employment of a negotiating procedure that initially cut all tariff rates automatically by 50 percent.<sup>15/</sup> After that, the parties negotiated sectoral and product-by-product exemptions.

The Kennedy Round was also important because, for the first time, an agreement was reached to resolve conflicts over nontariff barriers. It took the form of an Antidumping Code and an agreement to eliminate the U.S. system of American Selling Prices.<sup>16/</sup> Although the Congress blocked both of these, they were accepted in the next MTN.

One major economic sector, agriculture, was not a part of these liberalization efforts. A waiver that permitted broad quantitative restrictions on agricultural products was granted the United States in 1955, and this served as a precedent for other countries to protect their agricultural sectors as well. Also, developing countries, which have played a minor role in GATT negotiations, did not reduce their trade barriers over this period.

### The Tokyo Round

During the late 1960s, economic growth abated and inflation surged. Relatively high U.S. inflation, along with fixed exchange rates, caused the dollar to appreciate significantly in real terms. The resulting deterioration in the U.S. trade accounts led to the breakdown of the fixed exchange rate system

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15. A 50 percent linear cut emerged after a spirited debate about the merits of a linear versus a harmonized formula for cuts. Harmonization cuts higher tariff rates by a greater percentage than lower rates, pushing overall rates toward the average. Representatives of the European Community argued that the U.S. tariff schedule included a larger amount of above-average tariffs than did that of the EC, yielding significant protection to these products. EC tariffs tended to be more even because, during the formation of the EC, the common external tariff was calculated by averaging the tariffs of each member country.
  16. The American Selling Price (ASP) system applied a tariff rate for certain imports to a dutiable value set artificially high to equal the price of a competing good produced domestically instead of to the import's actual invoice price. ASP was applied to a relatively small portion of total imports, mainly benzenoid chemicals and rubber footwear.

in 1971. The high real value of the dollar exacerbated a U.S. decline in world markets as Europe regained competitiveness and as Japan and developing countries became competitive. U.S. producers lost ground not only in foreign markets, but also in many domestic markets.

The economic and political environment during this time, especially after the tripling of oil prices by OPEC in 1973, was more conducive to expanding protection rather than reducing it. Nevertheless, in 1974 the Congress provided the President with authority to enter the Tokyo Round of multilateral negotiations to liberalize trade policy.<sup>17/</sup> This act gave the President power to cut all tariffs by up to 60 percent (and to eliminate rates under 5 percent). The Congress also directed the President to negotiate agreements with other countries on nontariff barriers, recognizing their increasing use throughout the world. Unlike tariff reductions, though, any agreement on nontariff barriers had to be approved by majority votes in both the House and the Senate.

The major accomplishment of the Tokyo Round may have been to restrain major increases in protection. Nevertheless, the negotiations succeeded in lowering tariff rates for many goods and in producing a number of agreements on codes of conduct for nontariff barriers.

Tariff Reductions. Average U.S. tariff rates were again reduced by almost one-third, from about 6 percent to about 4 percent on dutiable imports, using a compromise automatic formula with some harmonization effect<sup>18/</sup>. Average U.S. tariff rates for industrial products were cut from 6.4 percent to 4.4 percent, while average tariffs on industrial products in the European Economic Community and Japan were cut from 6.6 percent to 4.7 percent, and from 5.5 percent to 2.8 percent, respectively (see Table 3). Nevertheless, each country excluded a number of key products from any tariff reduction. Table 4 shows the average Tokyo Round tariff cuts by broad industrial groups for the United States, the EC, and Japan. Although it is

17. The 1974 Trade Act followed a failed attempt to produce a trade bill with GATT authorization in 1972. The compromise that generated the 1974 act included provisions that made it easier for industries to receive trade adjustment assistance benefits and to obtain affirmative rulings for escape clause actions. Also, a new trade policy tool, provided under Section 301 of the act, gave the President the power and obligation to initiate unilaterally negotiations to reduce foreign trade barriers that restricted U.S. exports. Reciprocity in the form of retaliation could be employed if foreign governments did not appropriately cooperate.
18. As had been done in most previous rounds to reduce domestic adjustment costs, these cuts were phased in over time. In this case, the phase-in period was eight years, beginning in 1980.

TABLE 3: TOKYO-ROUND TARIFF CUTS BY STAGE OF PROCESSING FOR THE UNITED STATES, THE EUROPEAN COMMUNITY, JAPAN, AND CANADA (In percent)

| Country and Period | All Industrial Products | Raw Materials | Semi-Manufactures | Finished Manufactures |
|--------------------|-------------------------|---------------|-------------------|-----------------------|
| United States      |                         |               |                   |                       |
| Rates Before Tokyo | 6.5                     | 0.9           | 4.5               | 8.0                   |
| Rates After Tokyo  | 4.4                     | 0.2           | 3.0               | 5.7                   |
| Percent Cut        | 31                      | 77            | 33                | 29                    |
| European Community |                         |               |                   |                       |
| Rates Before Tokyo | 6.6                     | 0.2           | 5.1               | 9.7                   |
| Rates After Tokyo  | 4.7                     | 0.2           | 4.2               | 6.9                   |
| Percent Cut        | 29                      | 15            | 27                | 29                    |
| Japan              |                         |               |                   |                       |
| Rates Before Tokyo | 5.5                     | 1.5           | 6.6               | 12.5                  |
| Rates After Tokyo  | 2.8                     | 0.5           | 4.6               | 6.0                   |
| Percent Cut        | 49                      | 67            | 30                | 52                    |
| Canada             |                         |               |                   |                       |
| Rates Before Tokyo | 13.6                    | 1.0           | 14.8              | 13.8                  |
| Rates After Tokyo  | 7.9                     | 0.5           | 8.3               | 8.3                   |
| Percent Cut        | 42                      | 48            | 44                | 40                    |

SOURCES: Director General of GATT, *The Tokyo Round of Multilateral Trade Negotiations, Volume II Supplementary Report* (Geneva, 1980), p. 33; and the Congressional Budget Office.

hard to estimate the protective impact of changes in nominal tariffs, post-Tokyo Round tariffs remain above 7 percent for a number of industries in each country, most notably for textiles, apparel, and footwear. <sup>19/</sup>

19. Nominal tariffs increase the price of imports relative to domestically produced goods. The protective impact, however, is measured by how the quantity and price of imported and domestically produced goods change in response to a change in tariffs. This response depends most importantly on the reaction of consumers to changes in the relative prices of the imported goods and their domestic substitutes (price elasticities) and on the levels of tariffs on final goods compared to the levels of tariffs on intermediate inputs (the effective rate of protection).



TABLE 4. TOKYO-ROUND TARIFF CUTS BY INDUSTRY FOR THE UNITED STATES, THE EUROPEAN COMMUNITY, AND JAPAN (In percent)

|                                       | Pre-Tokyo-Round<br>Tariff Rates |      |       | Post-Tokyo-Round<br>Tariff Rates |      |       | Percent Cut |          |
|---------------------------------------|---------------------------------|------|-------|----------------------------------|------|-------|-------------|----------|
|                                       | U.S.                            | EC   | Japan | U.S.                             | EC   | Japan | U.S.        | EC Japan |
| Agriculture, Forestry, and Fisheries  | 2.2                             | 7.1  | 18.4  | 1.8                              | 4.9  | 18.4  | -18         | -31 0    |
| Food, Beverages, and Tobacco Products | 6.3                             | 12.4 | 25.4  | 4.7                              | 10.1 | 25.4  | -25         | -19 0    |
| Textiles                              | 14.4                            | 9.8  | 3.3   | 9.2                              | 7.2  | 3.3   | -36         | -27 0    |
| Wearing Apparel                       | 27.8                            | 16.8 | 13.8  | 22.7                             | 13.4 | 13.8  | -18         | -20 0    |
| Leather Products                      | 5.6                             | 3.7  | 3.0   | 4.2                              | 2.0  | 3.0   | -25         | -46 0    |
| Footwear                              | 8.8                             | 11.7 | 16.4  | 8.8                              | 11.6 | 15.7  | 0           | -1 -4    |
| Wood Products                         | 3.6                             | 3.3  | 0.3   | 1.7                              | 2.5  | 0.3   | -53         | -24 0    |
| Furniture and Fixtures                | 8.1                             | 8.5  | 7.8   | 4.1                              | 5.6  | 5.1   | -49         | -34 -35  |
| Paper and Paper Products              | 0.5                             | 7.3  | 2.1   | 0.2                              | 5.4  | 2.1   | -60         | -26 0    |
| Printing and Publishing               | 1.1                             | 3.2  | 0.2   | 0.7                              | 2.1  | 0.1   | -36         | -34 -50  |
| Chemicals                             | 3.8                             | 11.5 | 6.2   | 2.4                              | 8.0  | 4.8   | -37         | -30 -23  |
| Petroleum and Related Products        | 1.4                             | 1.2  | 2.8   | 1.4                              | 1.2  | 2.2   | 0           | 0 -21    |
| Rubber Products                       | 3.6                             | 5.3  | 1.5   | 2.5                              | 3.5  | 1.1   | -31         | -34 -27  |
| Nonmetallurgical Mineral Products     | 9.1                             | 5.2  | 0.6   | 5.3                              | 3.7  | 0.5   | -42         | -29 -17  |
| Glass and Glass Products              | 10.7                            | 9.9  | 7.5   | 6.2                              | 7.7  | 5.1   | -42         | -22 -32  |
| Iron and Steel                        | 4.7                             | 6.2  | 3.3   | 3.6                              | 4.7  | 2.8   | -23         | -24 -15  |
| Nonferrous Metals                     | 1.2                             | 2.6  | 1.1   | 0.7                              | 2.1  | 1.1   | -42         | -19 0    |
| Metal Products                        | 7.5                             | 7.9  | 6.9   | 4.8                              | 5.5  | 5.2   | -36         | -30 -25  |
| Nonelectrical Machinery               | 5.0                             | 6.5  | 9.1   | 3.3                              | 4.4  | 4.4   | -34         | -32 -52  |
| Electrical Machinery                  | 6.6                             | 9.9  | 7.4   | 4.4                              | 7.9  | 4.3   | -33         | -20 -42  |
| Transport Equipment                   | 3.3                             | 10.2 | 6.0   | 2.5                              | 8.0  | 1.5   | -24         | -22 -75  |
| Miscellaneous Manufactures            | 7.8                             | 7.7  | 6.0   | 4.2                              | 4.7  | 4.6   | -46         | -39 -23  |

SOURCES: Alan Deardorff and Robert Stern, "The Effects of the Tokyo Round on the Structure of Protection," in Robert Baldwin and Anne Krueger, eds., *The Structure and Evolution of Recent U.S. Trade Policy* (Chicago: University of Chicago Press for the National Bureau of Economic Research, 1984), pp. 370-375; and the Congressional Budget Office.

NOTE: Average tariff rates are calculated using own-country import weights over each country's detailed tariff schedule. Post-Tokyo-Round rates are being phased in over an eight-year period that began in 1980.

Even though the average tariff across all imports is relatively low for the major developed countries, grouping average tariffs by stage of processing (see Table 3) shows that tariff rates are significantly higher for final products than for raw materials. Such "tariff escalation" provides protection to manufacturing processes often far in excess of the nominal tariff rate on the good in question.<sup>20/</sup> Although average tariff rates have been reduced steadily over the last two MTNs, tariff escalation remains an important distortion of trade for several major sectors in the developed countries, an issue of particular interest to developing countries.

Codes of Conduct for Nontariff Trade Policies. The Tokyo Round was distinguished most clearly from previous MTNs by its success in negotiating a series of agreements (codes of conduct) to regulate how governments apply a number of nontariff trade policies. Many of these codes extend or refine obligations implied in GATT articles, but which were the subject of dispute as governments interpreted the GATT rules to their own advantage. Codes of conduct were established for the following government policies: anti-dumping rules, subsidies and countervailing measures, government procurement practices, customs valuation, technical standards, and import licensing. Additionally, nontariff barriers were liberalized in two product categories--civil aircraft and several types of agricultural trade, mainly for meat and cheese. Dispute settlement procedures were installed for each of the major codes. After much debate, no agreement was reached on safeguards for domestic industries (the U.S. escape clause). Late-starting negotiations on commercial counterfeiting policy were not concluded.

The Tokyo Round grappled with many of the problems associated with unfair trade practices and other impediments to "trading on a level playing field." Most prominent was the issue of subsidies, especially export subsidies. Almost all governments subsidize domestic producers to some degree. Most domestic subsidies--such as those for education, for assistance to low-income regions of a country, or for research and development--attack internal social and economic problems. Other subsidies explicitly favor exports or domestic producers of import substitutes. As economies become more open

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20. For example, if the tariff on a final good is 5 percent, but the tariff on intermediate inputs to the production of that good is zero, then (assuming that intermediate goods make up about 50 percent of the total production cost of the final good) the effective rate of protection for the production of the domestic good is 10 percent. That is, domestic producers can produce--add value to--at up to 10 percent higher costs than foreigners because of the above structure of protection. Note that consumers still pay only 5 percent more for the final good. See W.M. Corden, *The Theory of Protection* (New York: Oxford University Press, 1971), for the classic examination of effective rates of protection.

to foreign trade, the distinction between domestic and foreign trade subsidies becomes increasingly blurred.

The subsidy code clarified and modestly strengthened GATT rules, stated in articles III, VI, XVI, and XXIII, which permit subsidies "for the promotion of social and economic policy objectives," but which discourage those that impinge on trade. The code established criteria to help differentiate between a domestic and an export subsidy. Export subsidies for non-agricultural products were prohibited.<sup>21/</sup> Almost any domestic subsidy that treats domestic and export activities equally is allowed, but policies that injure foreign producers should be avoided.<sup>22/</sup>

When export subsidies are found to injure producers in another country, countervailing duties can be applied by the offended country to offset the impact of the subsidy. The code established two criteria--validation of an export subsidy and proof of material injury to a domestic industry--that must be satisfied before countervailing duties can be implemented.<sup>23/</sup> The size of the countervailing duty cannot exceed the amount of the subsidy. It is not meant to be retaliatory, but only to offset the export subsidy.

The subsidy code extends GATT's prohibition of export subsidies to include not only trade in manufactured goods but also, for the first time, raw material trade. The rules are to be applied fully for trade in minerals. For agricultural trade, export subsidies are tolerated, but should not allow the exporting country to gain "more than an equitable share of world export trade," and subsidized products should not be sold below the going market price.

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21. Subsidized export financing arrangements are not covered by GATT. Such actions by developed countries are covered by agreements of the Organization for Economic Cooperation and Development. Also, input subsidies for downstream export industries, often for natural resources, are not covered by GATT.
  22. Once it is agreed which subsidies are prohibited by GATT, the use of these actions must still be halted. Distinction is made in this debate between prohibiting the use of illegal nontariff trade barriers, and stopping only those illegal practices that cause injury to offended countries. By requiring injury tests, many insignificant cases (especially from small developing countries) can be filtered out of the process so that attention is concentrated on the most onerous actions. By sanctioning petty offenses, however, overall GATT discipline is threatened. For a thorough examination of subsidies in international trade, see Gary Hufbauer and Joanna Shelton Erb, *Subsidies in International Trade* (Washington, D.C.: Institute for International Economics, 1984).
  23. This subsidy code forced the United States to add an injury test for its countervailing duty cases. Injury tests now consider changes in both the quantity and prices of imports and similar domestic products ensuing from the foreign subsidy. The prohibition of export subsidies should have the greatest impact on other countries, which tend to use export subsidies more aggressively than the United States.

The Tokyo Round antidumping code sharpened article VI of the General Agreement by clarifying the standard for determining injury and by establishing an international dispute settlement procedure. The antidumping code, like the subsidies code, allows antidumping duties matching the dumping margin when foreign firms sell their products below normal prices in foreign markets. <sup>24/</sup>

The government procurement code requires that firms of other signatory countries be treated no less favorably than domestic firms when governments purchase goods. The equal treatment obligation applies only to those government entities specified in the Agreement, and governments bargained over which entities were to be included. Most importantly, national defense purchases were excluded. Also, procurement should be conducted in an open and transparent way.

Many countries apply technical standards to products before they can be sold. These standards, such as labeling, safety, pollution, and quality requirements, are also applied to imports. The standards code states that governments should apply these standards in a way that does not discriminate against imports.

The customs valuation code dictates that the dutiable value of imports be based in general on their actual transactions prices. This updates obligations spelled out in article VII of the General Agreement (on Valuation for Customs Purposes). One important aspect of this code is that it forced the United States to stop using the American Selling Price technique. The import licensing code makes the process of obtaining import licenses transparent and not overly burdensome.

Codes of Conduct Procedures. In negotiating the codes of conduct for non-tariff barriers, the Tokyo Round also established a set of guidelines for administering them. The codes stress the regulation of specific government policies; they do not provide a framework for actually liberalizing these trade barriers on a product-by-product basis. In this sense they differ fundamentally from the approach used successfully to reduce tariffs. GATT's

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24. The technicalities of determining when firms sell products below normal prices are notoriously complicated. Common definitions of dumping include selling in foreign markets at lower prices than in domestic or third-country markets, or charging prices below production costs. Dumping by exporters from non-market economies, or state-owned enterprises in general, poses special problems, since the relationship between costs and prices is often not known.

tariff reductions emphasized product-by-product liberalization on a reciprocal basis across all products, using rules to reinforce, but not lead, the liberalization process. Implementation of the codes, however, relies mainly on good-faith compliance by the signatories to each code.

When one country questions the good-faith compliance of another country in nontariff issues, the codes set forth dispute settlement procedures to help resolve the differences. These procedures operate along the same principles as those generally available under the provisions of the General Agreement, stressing passive oversight and adjudication of legal issues by panels.

During the Tokyo Round, negotiations on nontariff barriers were separated from the negotiations on tariffs. Separate working groups were established for each nontariff issue, most taking several years to complete their work. Final agreement on each code was based on code reciprocity, a restricted form of conditional most-favored-nation treatment. Under code reciprocity, each country could choose whether to sign the code and agree to abide by the code's discipline. Countries that did not sign a code were sometimes excluded from the benefits of the code, but they were not generally penalized in other parts of the negotiations. Almost all developed countries signed these codes, while most developing countries did not.<sup>25/</sup>

It is difficult to assess the effectiveness of the codes of conduct, since this depends on changes in policies and government actions that are hard to monitor or quantify.<sup>26/</sup> The prevailing level of conflict between countries over these nontariff barriers suggests that the codes have not significantly

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25. In order to induce developing countries to sign the various codes, those countries were exempted from the immediate prohibition on export subsidies and from limitations on many other nontariff barriers, including government procurement rules. But these exemptions were contingent on guarantees that such practices would be phased out over time. Most developing countries opted not to sign the codes initially, though many subsequently signed the subsidies code. They signed that code because, since an injury test was not required for the application of countervailing duties to export subsidies of nonsignatories, they were not protected when the United States threatened to place countervailing duties against export subsidies for textile and apparel products, even though most developing country exports were not large enough to cause material injury to the U.S. industry.

26. See Robert M. Stern, John H. Jackson and Bernard M. Hockman, *An Assessment of the Implementation and Operation of the Tokyo Round Codes*, Thames Essay No. 55 (Aldershot, New York: Gower for the Trade Policy Research Centre) for an assessment of the Tokyo Round Codes.



restrained the use of such barriers. The Tokyo Round codes probably can be best viewed as the beginning stage in a long process of developing common ground, and eventually some discipline, in this area. Most of the codes, especially the subsidies code, will be reassessed in the Uruguay Round.

### LOOKING AHEAD: THE URUGUAY ROUND AGENDA

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Trade ministers from over 90 countries joined in consensus last September to issue the Punta del Este Declaration, launching the Uruguay Round of trade negotiations. Included in this declaration are a list of agenda items and several negotiating procedure agreements. To a greater degree than in the past, this declaration stresses the need to control better the use of nontariff barriers and to expand GATT discipline to nonmanufacturing products, most importantly to trade in agriculture and services.

Each of the major negotiating groups will approach the Uruguay Round from a different perspective. The United States has been the driving force behind the negotiations, seeking to open foreign markets to its exports and to limit foreign subsidies of imports into its home market. Consequently, the United States has insisted that the agenda include efforts to open agricultural and service markets, protect intellectual property rights, and limit export subsidies. These goals would require major concessions by the European Community, Japan, and many developing countries. For any concession in agriculture, the EC wants equivalent reductions in what it perceives as U.S. farm subsidies. Japan, which has manufacturing trade surpluses with almost every trading partner, has taken a much more defensive stance, attempting to maintain the status quo.

Care was taken in the Punta del Este Declaration to maintain the developing countries' traditional nonreciprocal role. But since many of the issues concern policies frequently used by developing countries, especially newly industrialized countries, those countries are expected to become more involved than they were in past negotiations. Developing countries demand more open access to U.S. markets for natural resources and manufacturing, especially for many labor-intensive products such as apparel and electronics.

The Uruguay Round is expected to be the most difficult of all the rounds. Most nuisance trade barriers (that have little impact on trade flows) in developed countries have been eliminated. Significant trade policy reform now implies changes in national policies that have often been in place for many years and have strong domestic constituencies. The agenda can be separated into three groups of issues: those that have been discussed in previous GATT rounds; those being negotiated for the first time; and issues of concern to developing countries.

### Agenda Items With a Negotiation History

The dimensions of problems previously addressed are likely to be reasonably clear early in the negotiations, although the legacy of unresolved conflict presents difficulties. Hope for breakthroughs arises from the burdens that many of these policies impose on governments and consumers. Multilateral reforms, offering reciprocal benefits, may make major domestic policy reforms more palatable.

Barriers to Agricultural Trade. Despite considerable effort, previous rounds have done little to reduce government interference in the production and trade of agricultural products. As described in Chapter IV, import barriers or export subsidies in agricultural trade are often associated with domestic policies to support farm prices and incomes. Thus, any reform in agricultural trade implies changes in those domestic policies. For this reason, the negotiations will focus on the farm policies of the three largest agricultural markets in the free world, the United States, the European Community, and Japan. The United States and the EC, at great expense, subsidize and protect domestic production. All three restrict agricultural imports, most notably Japan. Other exporters, such as Canada and Australia, have relatively open agricultural policies, and complain that GATT does not recognize the rights of agricultural exporters who are seriously affected by the policies of rival exporters such as the United States and the EC.

Barriers to Trade in Tropical and Natural Resource Products. Trade in tropical and natural resource products receives special attention in the GATT negotiations because commodities such as coffee, rubber, tin, and copper make up a large proportion of total exports for many developing countries. Previous rounds have reduced developed-country tariffs on many of these products, but protection remains in some areas, especially for sugar and for commodities in the early processing stages. Developing countries see the elimination of all trade barriers on tropical and natural resource products, both raw and semiprocessed, as essential to their continued development.

Tariff Reductions. While average tariff rates in developed countries have been reduced dramatically in past rounds, they are still significant in a number of sectors, especially when the protective impact of tariff escalation is taken into account. (Table 4 shows the current, post-Tokyo Round average tariff rates by economic sector for the United States, the EC, and Japan.) Moreover, tariff protection in many developing countries is exten-

sive. The major goal of the tariff negotiations will be to reduce tariff rates that are disproportionately higher on final products than on the raw materials used by domestic manufacturers (to harmonize tariff schedules) while continuing to reduce overall tariff rates in developed countries.<sup>27/</sup> In many cases, major tariff reductions in particular sectors may be addressed in conjunction with efforts to lower nontariff barriers in those sectors. Considerable pressure will be exerted on newly industrialized countries to offer some tariff concessions in return for tariff cuts by developed countries.

Nontariff Barriers to Trade. Some nontariff barriers are relatively straightforward, as in the case of explicit import and export quotas, orderly marketing agreements, and voluntary export restraints. Others--including various financial subsidies, government procurement practices, and export targeting--are often less obvious. By basic GATT principles NTBs are recognized as particularly damaging forms of protection, but GATT has been unable to persuade member governments to discontinue them.<sup>28/</sup>

At a minimum, the negotiations will attempt to make nontariff barriers more transparent and to hold existing ones at current levels. In some cases, new rules will be devised to regulate such practices. Since many existing NTBs are used to protect certain industries, meaningful reform of these will likely depend on sectoral negotiations and some tradeoff of reciprocal concessions across sectors. On a more technical level, rules may be developed to regulate the use of orderly marketing arrangements and voluntary export restraints, which are currently outside the purview of GATT discipline.

A Code of Conduct for Escape-Clause Procedures. Escape-clause actions, a type of safeguard, allow governments to suspend GATT rules temporarily in order to protect domestic producers from injury resulting from surges in imports. Qualification for escape-clause relief requires proof that a domestic industry has sustained serious injury from increases in imports. No proof of unfair trade practices is needed. GATT rules acknowledge the right of

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27. The negotiations to lower tariffs may be limited until a major effort to harmonize tariff classifications among countries is completed in 1988.

28. For a good survey of nontariff barriers employed by the United States, Canada, and Japan, see Gary Saxonhouse and Robert Stern, "An Analytical Survey of Formal and Informal Barriers to International Trade and Investment in the United States, Canada and Japan," paper presented at the Conference on U.S.-Canadian Trade and Investment Relations with Japan, Ann Arbor, Michigan, April 2-3, 1987.

countries to use the escape clause to justify increases in protection, but offer little guidance on how escape-clause actions should be administered. As a result, escape-clause standards and procedures vary considerably among countries. Many governments--especially those of developing countries--claim that escape-clause actions in developed countries substitute protection for market adjustment, particularly in response to chronic shifts in comparative advantage. Also, the increasing use of such remedies as voluntary export restraints and orderly marketing agreements raises the fear that developed countries will increasingly resort to managed market schemes instead of competition to determine trade flows in key sectoral markets.

During the Tokyo Round, efforts to put together a code of conduct for escape-clause procedures were unsuccessful.<sup>29/</sup> Standardizing the escape-clause process will require rules for determining when imports are the cause of injury; what constitutes serious injury; what should be the appropriate length and form of the remedy (including whether remedies can be applied selectively to some, but not all importers of a product); whether the domestic industry should be required to make any adjustments; and how such determinations are to be made.

A Reassessment of the Tokyo Round Codes of Conduct. Several of the codes of conduct for nontariff barriers that were instituted during the Tokyo Round will be reassessed during the Uruguay Round. Governments perceive that many of the trade policies that these codes were designed to eliminate have continued unabated. They complain about the vagueness of the rules and the general impotence of the GATT dispute settlement process. Dissatisfaction is most apparent over the subsidies code.<sup>30/</sup> Part of this frustration is directed at subsidies in sectors that the codes were not intended to affect, most importantly agriculture and services. More funda-

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29. The major stumbling block to an agreement was whether trade policy remedies mandated by safeguard procedures could be applied selectively to some, but not all, exporters of a product. Selectivity violates the GATT principle of most-favored-nation treatment. The EC favored selectivity, but Japan and many developing countries feared that they would be the countries most often selected against. Current United States policy uses some selective remedies. For an overview of current U.S. import procedures, see U.S. International Trade Commission, *Summary of Statutory Provisions Related to Import Relief*, USITC Publication 1972 (Washington, D.C., April 1987).

30. It is this frustration that has led the United States to increasingly use the powers provided by Section 301 of the 1974 Trade Act, which authorizes the President to open negotiations to stop foreign trade barriers to U.S. exports. Section 301 actions generally operate outside of GATT's jurisdiction.

mentally, though, there is disagreement over when permissible domestic subsidies, including government procurement and state-owned enterprise activities, cross over to become detrimental export subsidies and import barriers.<sup>31/</sup>

Generally stricter rules for these government actions may resolve some problems, but general rules are not likely to be flexible enough to take account of special conditions in some sectors. To overcome this deficiency, sectoral negotiations may be most productive. Product-by-product negotiations would also offer the potential for tangible concessions negotiated on a reciprocal basis across sectors and countries.<sup>32/</sup>

Institutional Strengthening of GATT. The primary role of GATT in the world trading system is to facilitate trade liberalization over time. The rules and principles in the General Agreement represent consensus agreements by members on how governments should carry out trade policy. By most accounts, GATT has been a successful forum for major reductions in tariff protection. The Uruguay Round will debate how GATT can evolve into its next stage--when it can come to grips with nontariff barriers. A strengthening of GATT's role in regulating such trade practices will depend fundamentally on the member countries. To change the present system of passive enforcement into a more aggressive policing of stricter rules would require a significant transfer of power from member countries to GATT. An intermediate position would be for member countries to enact some GATT rules into domestic law.

### New Issues

New issues in the Uruguay Round pose many of the same problems as the others, but with the additional burden that the dimensions of these problems

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31. Governments subsidize domestic producers in many ways. Increasingly, though, a broad range of government programs--including educational, manpower, and financial assistance and regulation--affect foreign trade flows. As international competitiveness depends more and more on technological innovation and highly skilled work forces, many infrastructural policies that have been traditionally considered purely domestic matters now are viewed as matters related to international competitiveness. Moreover, consolidated government programs targeted at specific industries can affect competition between countries even where these programs do not explicitly subsidize exports.
  32. See Robert E. Baldwin, "Alternative Liberalization Strategies," Working Paper No. 2045, National Bureau of Economic Research, October 1986, for a more detailed examination of the benefits of product-by-product multilateral negotiations to reduce nontariff barriers.



are not well understood, both because of inadequate data and for lack of clear analysis. In many cases, the parties have not yet formulated detailed positions. Negotiations on some of these issues should be expected to take at least several years.

Barriers to Trade in Services. At the insistence of the United States, barriers to international trade in services will be dealt with for the first time by GATT during the Uruguay Round. Regulating government policies that affect trade in services introduces a number of new problems. Data on service trade flows are inadequate to guide negotiators. Barriers to service trade are closely linked to domestic federal and state regulation in such politically sensitive areas as labor (immigration); investment, finance, and banking; national security; and health and safety rules. Finally, services span such a broad range of economic activities that liberalization can have very uneven effects on different types of services.

Intellectual Property Rights. These rights involve most importantly copyright, patent, and counterfeiting protection for both goods and services. Since intellectual property, such as new technologies or artistic work, is often easy to duplicate, such rights can be protected only by laws.

Among developed countries, a series of agreements exist outside of GATT protecting most intellectual property rights. Efforts will be made during the Uruguay Round to incorporate these arrangements into the GATT framework. Much of the conflict over this issue relates to actions by developing countries, which have resisted such limitations on the ground that they are an unfair deterrent to the transfer of technology.

Investment Restrictions and Trade. Laws restricting foreign investment often affect international trade in goods and services. A firm's ability to compete in a foreign market sometimes hinges on the opportunity to establish subsidiary operations in that market, especially where close buyer-seller relationships are required. National restrictions on foreign investment commonly include: provisions limiting foreign ownership participation or prohibiting the establishment of foreign operations altogether; performance requirements that force subsidiaries to export certain amounts of their output, or to use certain amounts of domestic inputs; and prohibitions on currency conversion. Both developed and developing countries restrict foreign investment. Governments, both bilaterally and in bodies such as the Organization for Economic Cooperation and Development, have negotiated agreements monitoring policies that inhibit foreign investment flows. But such restrictions remain commonplace. Since the Uruguay Round will represent the first GATT-sponsored attempt to deal with investment-related trade issues, much of the initial effort will likely be in cataloging and analyzing the problem, and then developing some common ground for negotiations.

### The Uruguay Round and Developing Countries

An important set of issues concerns developing countries, especially the newly industrializing countries (NICs). Although the integration of developing countries into GATT negotiations and discipline is not a formal issue on the agenda for the Uruguay Round, it may prove to be one of its most important contributions.<sup>33/</sup>

Special Treatment for Developing Countries. Developing countries generally face constraints on growth that are different from those of developed countries. They may need to develop their economic, social, and political infrastructures concurrently, making them both reliant on and vulnerable to foreign influences. To pay for the financial and physical capital, and the technology, that are vital to the development process, they must earn foreign exchange by exporting commodities and (increasingly) manufactured goods to developed countries. To overcome this foreign exchange constraint, developing countries often seek to stimulate exports and manage imports as an integral component of their development strategies. As a result, they tend to rely more on aggressive trade policies and access to foreign markets than do developed countries.<sup>34/</sup>

The General Agreement takes account of these special circumstances by its treatment of developing countries, effectively exempting them from most of the discipline of GATT.<sup>35/</sup> Developing countries have not been expected to provide reciprocal concessions for tariff reductions by developed countries, and have not been seriously penalized for government policies that violate GATT rules. Since developed countries have less incentive to reduce trade barriers on products supplied principally by developing

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33. For a good overview of problems facing the United States and developing countries in new trade negotiations, see Ernest Preeg, ed., *Hard Bargaining Ahead: U.S. Trade Policy and Developing Countries* (Washington, D.C.: Overseas Development Council, 1985).

34. The debt crisis has exacerbated the foreign exchange problem for many developing countries. In order to earn the foreign exchange needed to satisfy debt-servicing requirements, the countries must increase their trade surpluses. The International Monetary Fund has made this a key condition for loans to debtor countries. Trade surpluses can be achieved either by increasing exports or reducing imports, almost always requiring active trade policies. Since imports can be more easily manipulated than exports, many developing countries have been forced to curtail key imports from developed countries. These actions have tended to lower economic growth rates, and they have stimulated domestic production of import substitutes. The debt crisis will thus have shaped future trading patterns between developing and developed countries long after the crisis itself has been resolved.

35. An entire section dealing with developing countries was added to the General Agreement in 1966. This section, Part IV, laid out the basis for the special treatment of developing countries.

countries if the latter do not respond with reciprocal concessions, the General Agreement included a unilateral commitment by developed countries to reduce trade barriers to imports from developing countries.

Developing countries have played a minor role in previous rounds. They have looked to the United Nations Conference on Trade and Development, rather than GATT, to express their demands for more stability in commodity markets, for preferential treatment of their exports to developed countries, and for improved access to developed-country markets in general. Some developing countries actually fought the tariff reductions achieved by the developed countries during the Tokyo Round on the ground that lower tariffs to everyone eroded the advantages of the Generalized System of Preferences (GSP) that were applied only to imports from developing countries.<sup>36/</sup> Developing countries see GATT's acceptance of trade restrictions by developed countries on textiles and apparel, and on agricultural products such as sugar, as proof of a bias against developing countries. Consequently, most developing countries have not actively participated in previous rounds, even though this has inhibited their ability to secure tariff reductions for their exports and to influence codes of conduct for nontariff barriers to their benefit.

A New Role for Developing Countries in GATT? Developing countries, led by the newly industrializing countries, are now fully competitive in a broad range of manufactured goods markets and are sometimes the principal suppliers of such goods. They also provide important markets for the developed countries' exports. But not all developing countries have shared in this success. Increasingly, the interests of the poorer developing countries differ from those of the more successful. The latter are being drawn into the GATT system, somewhat against their will, by the force of their success in world trade. The poorer developing countries, on the other hand, still require substantial assistance and special treatment.

In principle, a key task of the Uruguay Round should be to integrate the more successful developing countries into the GATT system. Although

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36. Baldwin and Murray estimated that the significant cuts in tariffs achieved during the Tokyo Round, applied on a most-favored-nation basis, provided benefits to developing countries that far outweighed their losses from the erosion of the GSP preference advantage. The authors found, however, that this result held more strongly for newly industrializing countries than for the poorer developing countries, who were rarely restrained by GSP import limitations. See Robert E. Baldwin and Tracy Murray, "MFN Tariff Reductions and Developing Country Trade Benefits Under the GSP," *The Economic Journal*, no. 87 (March 1977), p. 30-46.

the Punta del Este Declaration emphasizes that reciprocity is not required for developing countries, clearly the successful resolution of many of these issues will require some concessions from them. In fact, a number of issues on the agenda--including intellectual property rights, trade in tropical and natural resource products, and various nontariff barriers to trade in goods and services--are predominately conflicts between developed and developing countries as blocs. The first step, then, is for the newly industrializing countries to agree to abide more fully by the basic GATT rules and to enter the Uruguay Round negotiations as peer participants willing to make at least some reciprocal concessions.

Numerous practical problems must be overcome to integrate the more successful developing countries into the GATT system. They must be persuaded to forgo their present privileges as developing countries. It will be necessary to define the point at which a developing country qualifies for the rigor of graduation. Must graduating countries abide immediately by the full force of GATT, or will the rules be applied more leniently to them--possibly in different degree across products or types of policies--with some transitional phase-in period? Should special consideration be provided for those countries that bear particularly vexing foreign debt burdens? Should developing countries be able to shelter infant industries, especially service industries, until they become internationally competitive? How can GATT most effectively target benefits toward the most needy developing countries? Although not all of these issues will be dealt with explicitly in the Uruguay Round, most will arise during negotiations on the many agenda items in which developing countries are important players.





## CHAPTER III

# HIGH-TECHNOLOGY TRADE

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*The Uruguay Round is unlikely to see major breakthroughs in high-technology trade, most of which already falls within the scope of GATT. Discussion will focus on reducing the nontariff barriers that hamper trade in this field. U.S. negotiators will emphasize three such barriers: targeting by governments of particular industries for development; restrictions on the access of foreigners to domestic markets; and failure to protect rights to intellectual property such as patents and copyrights.*

*Targeting is the coordination of government policies to encourage the development of particular industries. This often includes subsidies for research and development, restrictions on government procurement, protection of markets, and restraints on investment. The extent to which governments ought to engage in R&D will require further definition. The European Community's use of substantial R&D subsidies as a development vehicle for its high-technology industries is likely to be a negotiating point.*

*Restrictions on market access are often used to favor domestic manufacturers of high-technology goods. Technical standards often function as import barriers, as do "buy national" requirements in government procurement. So do laws that restrict investment by requiring a firm to export a certain amount of its output, or to use a certain proportion of local materials. The Uruguay Round will have to strengthen GATT's technical standards and government procurement protocols to resolve these problems. Japan is likely to be pushed to expand access to its markets, while the EC and the United States will be pressed to phase out their restrictions on government procurement.*

*Intellectual property rights are most often breached by producers in the developing countries, where patent and copyright protection is uneven or nonexistent. A major focus will be on bringing existing intellectual property rights procedures into the GATT and strengthening them.*

High-technology manufactures include the following industries, in whole or in part: computers, communications equipment, electronic components, pharmaceuticals, aerospace, and instruments. This list should be considered illustrative rather than exhaustive. <sup>1/</sup>

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1. For a detailed discussion of the definition of high technology, see Congressional Budget Office, *Federal Financial Support for High-Technology Industries* (June 1985) and references therein.

High-technology industries tend to be fast-growing and highly productive, qualities that are vital to economic development. Competition in the intensely innovative market environment places a premium on product research and development, as well as on flexible and efficient production techniques. When world markets for high-technology products are expanding, firms from many countries can share in the benefits of large-scale production. When demand slumps, as has been the case recently, the battle for market share intensifies.

### CURRENT PROBLEMS IN HIGH-TECHNOLOGY TRADE

The recent deterioration in the trade performance of U.S. high-technology industries has been attributed by many to the policies of foreign governments that seek to aid their industries by stimulating exports or inhibiting imports. U.S. negotiators have made reducing barriers to trade in high-technology products a high priority for the Uruguay Round of negotiations. Unlike trade in agriculture and services, however, high-technology trade does not constitute an easily defined sector. As a consequence, issues related to trade in high-technology products will most likely be addressed under several policy-oriented agenda topics.

#### Government Policies

Government policies that most critically influence trade in high-technology products can be grouped in three broad categories: the practice of making certain industries the targets of favorable government policies that increase their competitiveness; the creation of nontariff barriers to trade; and the protection of intellectual property rights. Tariffs are not a significant issue in most high-technology product trade, which is already covered by GATT rules for tariffs. But the GATT rules offer weak or in some cases no remedy against targeting and nontariff barriers. In addition, trade in high-technology services, such as computer software services, and the protection of intellectual property rights have never been considered by GATT.

Some countries have entered into international agreements to guide policy in these areas, but there is little consistency overall. Many government policies influencing trade in high-technology products are integrally linked to national development and growth strategies. The underlying question is how far governments can or should go in assisting their strategic industries to become more internationally competitive.

If the Uruguay Round succeeds in strengthening the GATT rules and reducing barriers for high-technology products, U.S. producers should gain on balance. Most important, perhaps, would be the establishment of clear criteria as to what types of government policies are permissible. Given the basic competitiveness of U.S. producers, the United States stands to gain considerably by expanded trade in high-technology products and by better protection of intellectual property rights.

Underlying the entire discussion must be some conception of how new industries are created. Few major industries have arisen in the 20th century without some degree of governmental participation.<sup>2/</sup> As they develop, moreover, high-technology industries offer so much promise for economic growth that governments can ill afford to ignore them.<sup>3/</sup> For these reasons, the development of new industries is unlikely to be a private matter in the future. Some balance must be found between the right of every country to participate in growth and the desire of those already in these developing industries to enjoy the benefits of their past investment.

### Recent Trends

Although the United States appears to have a comparative advantage in the production of high-technology goods, the trade surpluses that accompany such advantage have declined significantly--from \$27.4 billion in 1980 to \$11.7 billion in 1986 (see Table 5). While this performance is clearly better than that of the overall merchandise balance of trade, which declined nearly sixfold over the same period, it largely reflects the high exports of the aerospace industry. As shown in Table 5, the balance of trade for high-technology industries excluding aircraft and parts was in deficit by \$1 billion in 1986.

The decline in the high-technology trade balance is primarily the result of increased imports: while high-technology exports grew by 40 percent over the 1980 to 1986 period, imports grew by 105 percent. The greatest import penetration has been in computers and office equipment, elec-

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2. See Richard R. Nelson, ed., *Government and Technical Progress: A Cross-Industry Analysis* (New York: Pergamon Press, 1982).
  3. For a discussion of why governments view high-technology industries as central to economic growth, see Congressional Budget Office, *Federal Financial Support for High-Technology Industries* (June 1985), pp. 1-17, and references therein.

TABLE 5. HIGH-TECHNOLOGY BALANCE OF TRADE FOR SELECTED YEARS  
(In billions of current dollars)

| Industry (Standard Industrial Classification) | 1980    |                 | 1983    |                 | 1986    |                 |
|-----------------------------------------------|---------|-----------------|---------|-----------------|---------|-----------------|
|                                               | Exports | Imports Balance | Exports | Imports Balance | Exports | Imports Balance |
| Drugs (283)                                   | 2.0     | 1.0             | 2.6     | 1.3             | 3.1     | 2.3             |
| Industrial Organic Chemicals (286)            | 6.4     | 2.2             | 6.0     | 2.9             | 6.9     | 4.1             |
| Computers and Office Equipment (357)          | 8.7     | 6.2             | 11.7    | 6.2             | 16.1    | 13.5            |
| Communications Equipment (366)                | 2.7     | 2.5             | 3.7     | 4.5             | 4.3     | 6.3             |
| Electronic Components (367)                   | 6.2     | 5.3             | 7.7     | 8.0             | 9.2     | 13.4            |
| Aircraft and Parts (372)                      | 14.6    | 2.7             | 14.6    | 2.6             | 18.4    | 5.7             |
| Scientific Instruments (380)                  | 7.8     | 4.8             | 8.5     | 6.1             | 9.7     | 10.7            |
| Total                                         | 48.4    | 21.0            | 54.8    | 31.6            | 67.8    | 56.1            |

SOURCE: U.S. Department of Commerce, Bureau of the Census.

tronic components, and scientific instruments (SIC 357, 367 and 380, respectively). Imports in these categories, together, rose nearly 300 percent.

If the deterioration of the high-technology trade balance can be partly explained by foreign industrial development policies, most of it seems to be the result of economic factors affecting trade in general. The high-technology balance has not declined as severely as the overall merchandise balance of trade, suggesting that the high value of the dollar and the strength of the U.S. economy should be considered as leading factors. This is not to say that individual trade practices are trivial or should be ignored, but rather to place them in proper perspective.

In recent years, other countries have challenged the virtual monopoly U.S. firms had enjoyed in high-technology markets. At the same time, demand in many of these markets has grown at a slower pace or even contracted. Thus, there are more suppliers than ever in markets that are growing less rapidly than had been expected.

The challengers, while violating many current U.S. sensibilities regarding proper trade policy, see their actions as not essentially different from measures the United States has taken in support of high technology. They ascribe the U.S. lead in this field to its space and military programs. They point out that the federal government has subsidized research and development (R&D) through lucrative defense contracts; that it has guaranteed markets through "Buy America" amendments to procurement legislation; and that on many occasions the government has even provided physical capital to manufacturers of these goods.

The major trade policy issues of concern to the United States in the high-technology areas are well known:

- o Targeting by other governments of industries in which the United States has a technological lead;
- o Restrictions placed on access to overseas markets; and
- o Lack of protection for intellectual property.

These issues have been at the heart of high-technology trade disputes throughout the 1980s. U.S. firms claim that they are excluded from markets abroad, that they are systematically underpriced in the U.S. market, and that their products (which are expensive to research and develop) are copied



by foreign manufacturers without appropriate recompense. Moreover, they believe that although U.S. consumers may reap temporary gains from such foreign practices as targeting or dumping, the long-term interests of the U.S. economy are hurt by them.

The prominence of these issues does not mean that the traditional tariff questions have vanished from the agenda. The European Community's tariffs on semiconductors average over 15 percent. U.S. computer tariffs of 4.6 percent offer some level of support for domestic manufacturing, especially at the lower end of the market. In addition, many developing countries have substantial tariffs on high-technology goods. But much progress has been made. The United States and Japan have agreed to reduce their semiconductor tariffs to zero, ahead of GATT's schedule. Nontariff barriers, however, remain much more significant impediments to trade.

#### TARGETING

Perhaps no issue in high-technology trade is receiving more attention than targeting--which may be defined as the coordinated attempt by a government to direct productive resources to selected domestic industries so as to make the industry more competitive internationally.<sup>4</sup> The intent of the government is paramount, since it is the coordination of many policies that gives targeting its reputed power. Targeting policies have many components. They may include any or all of the following: a protected market; preferential financing; subsidies of various kinds; tax benefits; investment restraints to keep foreigners out; government coordination of R&D; and special treatment of intellectual property rights. The protected market need not include the entire country, although it often does; it may be limited to government procurement, if that constitutes a large fraction of the market. Often preferential financing is available to the targeted industries, although it may be difficult to distinguish targeting from conventional economic development policies. Since high-technology industries characteristically require large R&D investments, assistance in financing R&D is of great benefit. Efforts to break into world markets are costly because the industry is rarely initially competitive and suffers substantial losses. For this reason, governments are often moved to subsidize it, as the European Community has with Airbus. Consumers of high-technology goods may be given tax benefits: for instance, in Japan

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4. See International Trade Commission, *Foreign Industrial Targeting and Its Effects on U.S. Industries; Phase I: Japan* (October 1983), p. 17.

purchasers of robots can depreciate them rapidly. Investment restraints may be used to keep foreigners out entirely, as was the case with the Japanese semiconductor industry, or to make them junior partners with domestic capital. Governments often intervene and coordinate decision-making to prevent costly duplication of R&D. This may or may not entail cartelizing the domestic market: Japan has been characterized by government coordination followed by brutal domestic competition. When it is necessary to obtain the requisite technology from abroad, laws or government practices that abrogate or reduce foreign intellectual-property rights (for example, by limiting licensing fees) may be part of the targeting effort.

Brazil's Informatics law provides a clear example of coordination of government policies for the benefit of a chosen industry--in this case, the small and mid-sized computer industry. The Brazilian Informatics strategy has four components. First, it imposes very stringent investment regulations. For example, 70 percent of the ownership and 100 percent of the voting power must be local. Second, the government will deny import licenses to foreign firms producing goods that can be produced locally. In essence, this policy grants local monopolies to Brazilian companies often still in their technological infancy. Third, the foreign access to the administration of this law has thus far been limited. For instance, U.S. companies have complained of unexplained overnight changes in policy that make planning impossible. Fourth, the Brazilian government has placed restrictions on intellectual property rights: software is currently not covered by copyright and the proposed software law has severe deficiencies; other regulations that apply to foreign technology limit both the payments for and the protection of intellectual property.

### Japanese Targeting

Some observers of Japan have argued that Japanese targeting is a misunderstood phenomenon. In essence, they say, the government of Japan is trying to use its Ministry of International Trade and Industry (MITI) to compensate for the lack of institutional flexibility enjoyed by U.S. firms. Most Japanese high-technology companies obtain their financing from banks and government finance agencies, which tend to be very conservative, rather than from the equity market. In the United States, when a new technology appears, venture capitalists compete with each other to turn the technology into new products, signaling to the rest of the economy that this is an area of potential rewards. MITI plays an equivalent role in Japan, signaling to bankers and corporations through its "visions," as its plans are called, that it favors certain investments. However, for the most part, U.S.

venture capitalists are quicker in responding than are the MITI bureaucrats. In fact, there is some indication that MITI follows the movements of U.S. venture capitalists as guides for investment strategy. <sup>5/</sup>

The cooperative R&D projects sponsored by MITI--the VLSI project earlier, and now the Fifth Generation Project--are similarly misperceived, according to this view. The Japanese educational system, combined with lifetime employment guarantees, produces researchers who are not as well-rounded in their technical background as U.S. personnel in comparable positions. Their primary loyalty is to the firm, not the profession; the movement of personnel among firms, and the informal exchanges that are typical among employees in U.S. high-technology firms, do not occur in Japan. Technological cross-pollination has been central to U.S. advance. In order to imitate it, MITI has encouraged firms to participate in cooperative research programs. <sup>6/</sup>

Another aspect of Japanese targeting that has often been misperceived, according to this view, involves the cost of capital. Targeted sectors are thought to have access to cheap capital, giving them an advantage over foreign firms. But most of the funds available to targeted industries have been available to all major industries; special government funds for targeted industries tend to be small by U.S. standards. The reason for lower capital costs in Japan is that the old system of capital controls gave Japanese households very little choice in deciding what to do with their savings. The result has been a massive transfer of income from households to the corporate sector as a whole rather than to specific industries.

Governmental subsidies to Japanese industry, either through credit or through the tax system, have been relatively small. In both Europe and the United States, subsidy programs are much larger. Moreover, the larger Japanese subsidies go to declining industries. Even in the targeted high-technology industries, the subsidies have often been directed at products

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5. This discussion is largely taken from Gary Saxonhouse, "What is All This About 'Industrial Targeting' in Japan," *World Economy* (September 1983), pp. 253-273. See also Gary Saxonhouse, "The Micro- and Macroeconomics of Foreign Sales to Japan," in William R. Cline, ed., *Trade Policy in the 1980s* (Washington, D.C.: Institute for International Economics, 1983), pp. 259-304.

6. Despite the "success" of Japanese research cooperatives, the evidence for extensive firm participation is not substantial. Japanese firms that participate in government-sponsored research cooperatives can depreciate assets used in this research in one year. In 1982 the cost of this provision of Japanese tax law was only \$17 million, suggesting minimal participation. See Saxonhouse, p. 266.

rather than firms. For instance, special depreciation provisions are allowed for purchases of industrial robots--even if the robot purchased is not of Japanese origin.<sup>7</sup>

The principal function of Japanese targeting has been to prevent foreign access to a market until the domestic industry reached the point at which it no longer needed this level of protection. Even here, however, the role of the government should not be overstated. The Japanese government rarely erects formal barriers to trade anymore; its tariff rates on high-technology goods are as low as or lower than those of the United States (see Chapter II), and formal quotas have been abolished in these goods. Whether because of the homogeneous culture or as a result of years of strict government regulation, foreign firms seem to have great difficulty breaking into Japanese markets. Considering the high degree of interfirm competition in Japanese high-technology industries, collusive behavior seems unlikely even though it has been widely reported. Most recently, a MITI official reportedly admitted that efforts to develop a domestic supercomputer industry meant that U.S. companies, which now dominate the world industry, would no longer find buyers in Japan. The report has since been denied, and the official has stated that he merely said U.S. supercomputer companies "need to change their respective philosophies and policies" to compete in Japan.<sup>8</sup> Subsequently, the government of Japan submitted a plan to the Diet for increasing imports, involving the procurement of \$1.0 billion worth of foreign goods--including supercomputers and aircraft--mainly during fiscal year 1987.<sup>9</sup> Whether this is merely a gesture to diffuse trade frictions or a serious effort to liberalize procurement policy remains to be seen.

Private actors also seem to behave in a discriminatory manner. U.S. semiconductor manufacturers report that their markets dry up as soon as Japanese equivalents to their chips become available. The U.S. independent producers' share of the Japanese semiconductor market has been remarkably constant at around 10 percent--which, given the changing

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7. International Trade Commission, *Foreign Industrial Targeting and its Effects on U.S. Industries, Phase I: Japan* (October 1983), p. 9.
  8. Makoto Kuroda, in a letter to the editor of the *Washington Post*, May 23, 1987, p. A21. For the text of the State Department cable on the Japanese official's comments, see the *Washington Post*, April 28, 1987, p. C2.
  9. Sally Solo, "Japan Economic Package Seen Raising Imports \$5B," *Electronics News*, June 1, 1987, p. 4.

relative positions of the Japanese and U.S. industries, seems more the result of a compact than of the working of free trade.<sup>10/</sup>

A final misconception about Japanese targeting is that it always succeeds. Non-Japanese observers who often complain about the ineptness of their own government's policies attribute almost superhuman economic powers to Japan, and especially to MITI. The government of Japan has subsidized the aircraft industry for years, but Japan has not yet become a major force in that industry, although it is becoming important in subcontracting.<sup>11/</sup> On the other hand, the Japanese aircraft industry has been treated differently than other targeted industries in that it is prohibited from exporting many products and has to face competition from firms with protected markets of their own. MITI's failures are best seen in more mature industries such as aluminum, petrochemicals, and shipbuilding. Similarly, many of the Japanese successes in automobiles have come about because their automakers ignored MITI's guidance.

#### R&D Subsidies

Subsidies for research and development have become an issue in high-technology trade mainly because they are widely used by countries in targeting one or another high-technology industry for preferential development. Whether R&D subsidies are viewed as legitimate depends on the context in which they occur. Most economists (and industry observers) believe that a government has to step in to encourage R&D, especially at the basic level, because if left to its own devices the market is not likely to devote sufficient resources to R&D.<sup>12/</sup> Because other firms can imitate the inventing firm and capture a share of the market and the profits, the benefits from an invention to the inventing firm may be less than the benefits to society as a whole. Consequently firms devote less resources to

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10. The relative shares of Japanese and U.S. semiconductor companies in each country's market is a matter of some contention. Most U.S. industry estimates overstate the Japanese share in the U.S. market by excluding IBM and other companies that produce for internal use. Similarly, they understate the U.S. presence in Japan. See Semiconductor Industry Association, *Japanese Market Barriers in Microelectronics* (June 14, 1985).
  11. International Trade Commission, *Foreign Industrial Targeting, and its Effects on U.S. Industry, Phase I: Japan* (October 1983), pp. 126 and 155-163; Aerospace Industries Association of America, *Aerospace Facts and Figures, 1986-1987*, p. 132.
  12. See Congressional Budget Office, *Federal Financial Support for High-Technology Industries* (June 1985), pp. 1-3.



inventive activity than the good of society may suggest. The mere act of supporting R&D is not seen as an illegitimate government activity. But the extent to which governments ought to do this, especially when there are international repercussions, is a matter yet to be settled.

Much depends on the kinds of R&D being performed and on how the results are disseminated. Money spent on basic research, or even on generic industrial research, has broad applicability and represents less of a threat to the high-technology industries of competing nations than does an effort to develop a specific high-technology product for export. Similarly, if research results are widely available, questions regarding the propriety of the research effort are less likely to be raised. <sup>13/</sup>

Many governments pursue massive R&D subsidy programs in an effort to develop high-technology industries. European countries have joined to support first the Concorde, then Airbus, and now Esprit and Eureka (European Community programs on information technology and on advanced technologies in general); hundreds of millions, if not billions, of dollars have gone into each effort. South Korea is spending hundred of millions to develop a semiconductor industry. Taiwan is also making efforts on behalf of its electronic industries. By contrast, Japanese subsidies are small: the government has concentrated on providing seed money to involve private actors, but the sums have not been large compared with those spent by other countries. In fact, more funds have gone to declining industries and agriculture than to high-technology R&D.

U.S. government agencies also fund large amounts of research for military and other purposes, and this has some relevance for high-technology markets. A recent CBO analysis found that, in 1983, federal agencies spent \$8.4 billion on programs to enhance productive capabilities in high-technology industries--not including the large expenditures by the Department of Defense (DoD) and the National Aeronautics and Space Administration (NASA) on R&D for goods being purchased for agency use, such as weapons research, which would obviously add tens of billions to this total. <sup>14/</sup> The

13. The U.S. government has recently begun to move away from giving free access to federally generated technology. The Administration concluded that the reason federal patents were licensed less often than privately generated patents was that the lack of exclusive rights gave private actors no incentive to invest in commercializing federal technology. In response, the Congress passed the Technology Transfer Act of 1986, which permits exclusive licensing under some circumstances.
14. Congressional Budget Office, *Federal Financial Support for High-Technology Industries* (June 1985), p. 31. See subsequent pages in that work for a discussion of the nature and successes of these programs.

purchase of high-technology equipment for the defense and space programs is not done to aid high-technology exports. The government will have to continue funding such research in order to accomplish its military and space missions. At the same time, however, it must be recognized that technological advances are often stimulated by military and space spending. In fact, Japan and the European Community often point to the large amount of U.S. military and space R&D spending in defense of their own programs, which are much smaller. In material describing their R&D programs, they often mention the DoD and NASA as standards to emulate.

Since targeting depends on government intentions, rather than on the amounts spent, any discussion of it must focus on the tactics used by governments to target: nontariff barriers, export subsidies, restrictions on intellectual property rights, and the like. Simply stated, GATT cannot legislate intentions; it can, however, proscribe actions. Although the Uruguay Round is unlikely to produce a protocol on targeting per se, the issue will underlie many specific negotiations--particularly negotiations on strengthening the Tokyo Round codes on subsidies and government procurement and negotiations on intellectual property rights.

## ACCESS TO MARKETS

The very nature of high-technology goods often makes trade in them prone to disruption by governments anxious to exclude such imports from the national market. First, a large part of demand is from governments or government-controlled entities, such as the national telephone and telegraph systems, national airlines, defense ministries, and health systems. Second, because many of the products are new, standards of health, safety, and performance may not have been fully developed, and this provides another means of excluding them.

### Government Procurement

Broadening the scope and enforcement of GATT's government procurement code, and liberalizing government procurement in general, are of special importance to U.S. high-technology industries. As noted above, governments and government-controlled entities covered by the procurement code buy a disproportionate amount of high-technology equipment, most importantly for their telecommunications systems. On the one hand, the Administration and concerned U.S. firms have been pressing for open pro-

curement processes. On the other hand, exclusive contracts are seen by many industrialized countries as a means of encouraging development of their own high-technology industries, and they may be loathe to relinquish this device.

Another weakness in the U.S. bargaining position on this issue is that U.S. adherence to the covenant has been mixed. Although in passing the Trade Agreements Act of 1979 the Congress implemented the agreement on government procurement and the other protocols negotiated during the Tokyo Round, the United States continues to exclude foreign firms from participating in many government procurement contracts. The code calls for most-favored-nation treatment in this sphere--that is, it requires signatory governments, in making procurement decisions, to grant products originating in any other signatory country treatment no less favorable than that afforded to domestic products or to the products of any other country. The whole procurement process, including the drawing up of specifications, was to become more open. Only military arms purchases and contracts of small amount are exempt from these requirements.<sup>15/</sup> Despite these requirements, the Congress has on several occasions passed laws restricting procurement contracts for such items as highway and mass transit construction materials to U.S. firms. Public works bills since 1979 have also contained Buy America clauses.<sup>16/</sup>

At first glance U.S. firms may seem to have more to gain from the procurement agreement than those of other countries, but if the treatment of weapons procurement changes radically, U.S. firms may find themselves challenged in the profitable U.S. military markets for the first time. Currently, exempted weapons procurement plays a large part in U.S. government procurement; of the \$99.6 billion the federal government spent on goods of all sorts in 1985, \$66.8 billion was spent on the acquisition of military equipment.<sup>17/</sup> Thus two-thirds of U.S. government purchases are exempt from the GATT procurement code. If the next round of talks continues to exempt military equipment, U.S. firms stand to gain. Other nations want to remove this exclusion, however.

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15. Congressional Budget Office, *The Effects of the Tokyo Round of Multilateral Trade Negotiations on the U.S. Economy: An Updated View* (July 1979), p.26.
  16. For a list of recent Congressionally-imposed restrictions on government procurement, see Raymond Ahearn and Alfred Reifman, "Trade Policymaking in the Congress," in Robert Baldwin, ed., *Recent Issues and Initiatives in U.S. Trade Policy* (Cambridge, Mass: National Bureau of Economic Research, 1984), pp. 47-49.
  17. An additional \$13.4 billion was spent on structures.

Change, when it comes, should favor U.S. exporters. In 1984, the European Community spent roughly \$10 billion on telephone equipment, and U.S. exports accounted for only \$120 million of this.<sup>18/</sup> The relatively low sales of U.S. equipment reflect the fact that government procurement regulations tend to dominate these purchase decisions in the EC. Deregulation is reducing the level of government involvement in telecommunications, but progress will be slow. Moreover, the government of West Germany, which controls the largest single market in the EC, is in no hurry to deregulate its telephone system.

Some large U.S. firms are already participating heavily in the EC market, through subsidiaries. The German subsidiaries of U.S. companies produce roughly 20 percent of the equipment for the German telephone monopoly (Deutsche Bundespost). But this limits U.S. participation in the EC market to firms old enough or large enough to have foreign subsidiaries. Many of the relatively small or new telecommunications equipment manufacturers may find themselves excluded from these markets.

#### Technical Standards

The Tokyo Round also produced a technical standards code, which, much like the government procurement code, obligates signatories not to use technical standards as barriers to trade and to make those standards (and the processes establishing and applying them) more accessible. Technical standards are used most often to impede imports in the pharmaceutical and the telecommunications equipment industries.<sup>19/</sup> Some countries have standards that are incompatible with those used by others; in France, for example, the standard for color television is different from that used elsewhere and has permitted the development of a national industry. In other instances, standards are also often set so that their noncritical parameters favor local producers. Exterior dimensions may be used in this way. For instance, West German health standards sometimes specify lengths of electronic keyboards, which do not correspond to lengths used internationally.

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18. The U.S. export figure is slightly understated in that it does not include ground station or microwave equipment.

19. For a more complete discussion of the use of technical standards in restraint of trade, see Robert Cohen, Richard Ferguson, and Michael Oppenheimer, *Nontariff Barriers to High-Technology Trade* (Boulder, Colo.: Westview Press, 1985), pp. 23-31.

Enforcement procedures also impede high-technology imports. First, if technical standards are not compiled in a readily accessible manner, the time and cost of learning them may discourage companies from attempting to penetrate the market. Second, the standards may be more stringently enforced on imports than on domestic products. Third, obstacles may be placed in the way of a company seeking technical certification--for example, by requiring it to repeat all its testing within the importing country. In the case of drugs, where tests take years, this requirement can be prohibitive. Also, repeating tests discriminates against small firms, which can less easily bear the costs. In some cases, companies have been required to show that each batch of products meets the technical standards, rather than doing the tests once and then certifying that subsequent production is according to specification.

### Other Market Barriers

Two other nontariff barriers are used by governments to restrict access to high-technology markets: import licenses and performance requirements.<sup>20</sup> Import licenses are used throughout the developing world for a wide variety of purposes: restricting imports of luxury goods, conserving foreign currency reserves, and protecting or encouraging local industries.

Performance requirements are not directed against importers per se, but are imposed on firms that want to invest in a country. They stipulate things the entrant must do in order to be allowed to set up shop, such as exporting a certain amount of its output or using a certain proportion of local materials.

### INTELLECTUAL PROPERTY RIGHTS

Intellectual property rights are of great concern to high-technology industries. The United States is laboratory to the world, and high-technology industries perform a large fraction of this task. The major areas of concern are product and process patents (including extending such coverage to pharmaceuticals and biotechnology), copyrights (especially for computer software), and trademark law.

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20. Intellectual property rights may also be used to limit access; they are discussed in the following section.



U.S. companies have suffered disproportionately from the lack of rigorous and uniform international standards for intellectual property rights. Foreign manufacturers have been able to mimic a wide range of U.S. name-brand goods, and even invade the U.S. market with them. In some countries, manufacturers licensed to provide U.S. products for the local market--for example, pharmaceuticals--export them to the U.S. market at lower prices. Because they do not have to recapture R&D or marketing costs, these producers can sell them to U.S. consumers as generic drugs at a fraction of the prices charged by name-brand producers.<sup>21/</sup> The U.S. International Trade Commission estimates that infringement of intellectual property worldwide cost \$8 billion to \$20 billion in lost U.S. sales.<sup>22/</sup>

The less-developed world takes a different view of the issue, however, and even among industrialized countries there have been differences of opinion. Developing countries view weak intellectual property right laws as a vehicle for technology transfer. They argue that even major technological developments are properly viewed as elaborations of past contributions, which are the property of society as a whole. They do not assign as much weight to individual contributions as do industrialized countries. Moreover, they do not have a great deal of intellectual property to lose. They note that when the United States was a developing country, it did not recognize other countries' copyright restrictions. Only at the beginning of this century, when it had become one of the major industrial powers, did it agree to abide by other countries' copyrights. Furthermore, the United States still does not adhere to the Berne Convention, the major international institution regulating intellectual property rights, in part because the convention gives authors too much control over their works.<sup>23/</sup>

A recent bureaucratic struggle in Japan illustrates some of the frictions within the industrialized world regarding intellectual property rights, and the fragility of even the current level of protection. MITI wanted to change the treatment accorded computer software from straightforward copyright to a hybrid form of protection that would be administered by

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21. Of course, many generic drugs are not produced this way, but are simply standard chemical compounds sold at low markups.

22. International Trade Commission, *The Effects of Foreign Product Counterfeiting on U.S. Industry* (January 1984), p. xiv.

23. Recently the Administration has signaled its intent to join Berne. See *Report of the President's Commission on Industrial Competitiveness*, Appendix D. A Special Report on the Protection of Intellectual Property Rights (December 1984), p. 335.

MITI. This would have substantially lowered the current standard of protection, and would also have given MITI the authority to require compulsory licensing should it deem this in the national interest. Fortunately for U.S. computer software companies, the Ministry of Education was successful in its attempts to retain control of the copyrighting function.

The problems faced by U.S. high-technology firms in the newly industrializing countries are legion. Mexico and Brazil limit process patents on some industrial processes. In South Korea and Taiwan, patent law does not cover chemicals or pharmaceuticals. Further, in South Korea, computer software cannot yet be copyrighted, although such a law is currently being negotiated with the United States. In most of these countries, new technologies, such as biotechnology and satellite communications, are not covered by law.

A related issue, that of counterfeiting, is much less divisive than the conflicts over patents and copyrights. While not all governments are willing or able to devote a lot of resources to combating counterfeiting, many recognize that it should not be tolerated. Patent and copyright policies, on the other hand, involve more complex trade-offs between development needs and individual rights. The Administration has been trying through bilateral negotiations to encourage countries with the most active counterfeiting industries to put a stop to them. Its biggest success has been the recent anticounterfeiting law in Taiwan, the country that has led in the unauthorized duplication of U.S. goods. Whether enforcement of the law will be satisfactory to U.S. interests remains to be seen.

### BARGAINING POSITIONS IN THE URUGUAY ROUND

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While the United States imports high-technology goods from or exports them to virtually every other nation, this trade is predominantly with Western Europe, Japan, and some newly industrializing countries. Japan heads the list in most categories, both as buyer and seller. In many cases, however, the most vexing trade problems are not with major trading partners but with developing countries, especially in issues of intellectual property rights.

#### Japan

Japan is second to Canada as an importer of U.S. high-technology goods, even though it maintains a net export surplus in them. In 1985, it bought \$5.1 billion worth of U.S. high-technology goods and sold \$12 billion worth of its own high-technology goods to the United States.

Japan's position as a high-technology exporter is likely to make it a reluctant participant in the expansion of GATT in some of these areas. By and large, it has benefited from the practices that are of concern to the United States: Japanese targeting of high-technology industries has often, though not always, proved successful; and its high-technology industries benefit from nontariff barriers. On the other hand, given their drive to improve their software industry, and their success in biotechnology, the Japanese may have acquired an interest in protecting intellectual property rights that they did not display during the Tokyo Round.

Recent U.S. experience in negotiating the semiconductor accord with Japan illustrates the difficulty GATT may face in breaking new ground on targeting and NTBs. Japanese penetration of the U.S. semiconductor memory market led several U.S. semiconductor manufacturers and the U.S. government to begin antidumping proceedings against the Japanese semiconductor exporters. Faced with threats of antidumping duties, the Japanese government finally agreed to have Japanese companies sell semiconductor memories at "fair market value" both in the United States and in third markets, and to encourage domestic consumers to buy semiconductors from U.S.-based companies so as to increase the U.S. share of the Japanese market. Japanese companies complied with the provisions forbidding dumping in the United States (the aspect of the agreement the U.S. government could most easily enforce), but as of March 1987, MITI had been unable or unwilling to make them sell at similar prices in third markets or to open the domestic market further to U.S. companies. Consequently the U.S. government imposed duties on several dozen Japanese imports. The Japanese responded with concern, and trade relations deteriorated. Considering the leverage the U.S. government had over Japan in this case, the portents for GATT are not favorable.

It is of interest that the U.S.-Japan semiconductor accord has been challenged by the EC under GATT. The EC argues that the accord cartelizes the world semiconductor market. (Between them, the United States and Japan produce upward of 75 percent of world semiconductor output.) The EC also claims that the accord gives U.S. semiconductors preference in the Japanese market. This challenge shows how unsatisfactory bilateral solutions can be; no matter how well they may address immediate problems, they ignore far-reaching multilateral implications.

Recently the Japanese government has made clear its intention to move into two new high-technology areas--communications satellites and jet fighters. If past experience is any guide, substantial Japanese technological success in these areas may be followed by the disappearance of the

Japanese market for U.S. satellites and jet fighters. In some sense, the ability of GATT to open the Japanese market to foreign high-technology goods will be the touchstone of its ability to broaden access to markets; without success in this case, any other GATT initiative will have missed the central issue.

### Newly Industrializing Countries

It is difficult to generalize about trade relations with a group as heterogeneous as the newly industrializing countries (defined for the purposes of this discussion to include Mexico, Brazil, South Korea, Taiwan, Hong Kong, and Singapore). In 1985, the United States had a \$5 billion high-technology trade deficit with these seven countries. To a large extent, this trade imbalance results from the small internal markets in these countries. Very often U.S. exports to these countries are goods undergoing production, to be reexported to the United States or some other country for finishing and sale. The level of U.S. exports to these countries is also limited because of the international debts owed by Mexico and Brazil, which are obliged to restrict imports as part of the austerity measures imposed on them by the international banking community, with the consent of U.S. authorities. Nevertheless, these countries employ a wide range of government policies to manipulate high-technology trade, including nontariff barriers and the limited protection given intellectual property rights.

Developing countries have varying reasons for keeping imports out. Some, in their efforts to imitate the Japanese industrial success, are beginning to target specific industries as "strategic" to their economic development. Among other techniques, they use nontariff barriers to restrict imports so as to guarantee the targeted industry a market for its output. Other countries employ the older import substitution strategy, which also requires keeping foreign products out for the sake of industrial development. In other cases, imports are kept out as part of austerity programs designed to help relieve foreign debt problems. Whatever their reasons, a large number of these countries have nontariff barriers: according to one survey, 59 percent of upper-middle-income developing countries have government import controls on all or a large number of products. <sup>24/</sup>

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24. J.M. Finger and Andrzej Olechowski, "Trade Barriers: Who Does What to Whom" (June 1986, processed).

Many newly industrializing countries use investment restraints that systematically discriminate against foreign investors. These restraints can range from a total ban on direct foreign investment in certain industries to local majority ownership requirements. There may also be local content regulations, export requirements, and/or restrictions on repatriation of profits. To a large extent, these regulations stem from the belief that foreign investors often did not act in the best interests of the host nation. They are seen as using transfer pricing, foreign sourcing of inputs, and profiteering to extract wealth without delivering economic development in return.<sup>25/</sup>

The United States and other industrialized countries have proposed that discussion of investment restraints be included in the Uruguay Round. The U.S. position has been considerably weakened by its recent response to Fujitsu's attempted purchase of the Fairchild Semiconductor company. Although the Administration took no action, its very publicized deliberations caused Fujitsu to withdraw the offer.

Efforts to eliminate nontariff barriers within the GATT framework will encounter resistance for the reasons mentioned above. A more effective approach might be within a bilateral context of mutual concessions and progressive liberalization. Governments may be more willing to lower their barriers to U.S. imports selectively than they would be to lower barriers to all imports if the latter course meant being flooded by imports from Japan, with which many of these countries already have trade deficits. For instance, Taiwan already gives preferences in import licenses to U.S. goods over Japanese goods. Since U.S. high technology imports from this area exceed U.S. exports to the region, bilateral reduction would be in the U.S. interest.<sup>26/</sup> But bilateral arrangements would mean moving away from the most-favored-nation system of trading, which has historically been a principle of U.S. trade policy.

Another major issue facing the newly industrializing countries is whether they are ready for graduation from their special status in GATT. Their favorable high-technology trade balance has come from trade with the industrialized world, where they enjoy some benefit from the generalized system of preferences.<sup>26/</sup> While U.S. pressure is forcing individual coun-

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25. Whether or not these allegations are true is not completely relevant, since they are perceived as true in much of the underdeveloped world and, to that extent, influence the policies of the governments.

26. See Chapter II for a fuller discussion.



tries to bring their conduct into line with the practices of industrialized nations, these efforts are on a country-by-country, issue-by-issue, sometimes industry-by-industry basis. It is not in the U.S. interest to exhaust its good will (and trade staff) in negotiating on a piecemeal basis; consequently, the United States and other industrialized countries may press this issue with the newly industrializing countries. It will not be easy for those countries to make such a change. In many cases their current industrial policies are part of complex domestic political compromises and represent their only perceived avenue of growth.

### The European Community

Substantial expansion of the GATT into the area of subsidies, government procurement, and other nontariff barriers would present a major challenge to the EC's high-technology programs. The Europeans view themselves as falling behind the United States and Japan in the race for new markets. Like Japan and the United States, the EC has a highly trained work force of engineers and technicians, and the research infrastructure needed by these industries. The Europeans feel that their competitors have enjoyed special advantages--the United States from its massive military and space effort, and Japan from its protected domestic market. While the EC has imposed restrictions of its own on high-technology trade, it has allowed U.S. high-technology firms to operate freely there. To keep from falling farther behind, the Europeans feel they need to imitate U.S. development policy and provide additional government stimulus for technological development.

To this end, the EC has embarked upon communitywide research programs rather than continue national subsidization of splintered industries and markets. These programs include Airbus, the European Space Agency, the European Strategic Program for Research into Technology (ESPRIT), and the European Research Coordinating Agency (EUREKA). These programs enjoy a substantial degree of government subsidy and direction. The French and British governments have already approved \$1.7 billion for development of the next generation of Airbus. As of the end of May 1987, the West German government was considering adding another \$1 billion to that figure.<sup>27/</sup> ESPRIT alone is projected to cost the 10 member governments \$650 million over the next 10 years.<sup>28/</sup> The vast majority of the Com-

27. Steven Greenhouse, "Airbus Offensive Threat," *New York Times*, May 28, 1987.

28. Pierre-Henri Laurent, "Renaissance Through Technology: The European Community Decision on ESPRIT," *Fletcher Forum* (Winter 1985), p. 159.

munity's R&D funds, however, are still allocated at the national level.<sup>29/</sup> Even here, however, member countries are moving away from the traditional "technology push" strategy of flagship electronic companies and protected national telecommunications markets.<sup>30/</sup> In some sense, the EC could be said to be moving away from individual protected markets and subsidized industries--which are not in the spirit of GATT--to regionally protected markets and subsidized industries, which are also not in the spirit of GATT.

### The United States

While the United States has been in the forefront of the drive to expand GATT into new high-technology areas, it is likely to encounter problems of its own from such an expansion--principally with respect to government procurement and subsidies for R&D. In addition, as the U.S.-Japan semiconductor accord illustrates, U.S. impatience with the GATT may lead it into agreements that are themselves violations of the GATT.

In the United States, the "buy national" restrictions on federal procurement have been extended to goods far beyond the purview of national defense. Removing such restrictions on government purchases of nonmilitary goods both here and abroad should be in the interest of U.S. high-technology firms; they would gain in sales to foreign markets, while the losses in domestic markets would be suffered mainly by mature industries. In this sense, the choice facing the Congress is whether it wants to protect domestic textile, steel, and cement markets at the cost of foreign telecommunications equipment and aerospace markets. Government procurement of structures and nonmilitary equipment is on the order of \$50 billion per year, much of it covered by "buy national" clauses. Such a large market would indeed tempt foreign competition.

If a GATT government procurement code was extended to military equipment, at either the prime contractor or subcontractor level, the trade-off would be more difficult. The military has already expressed concern about foreign-sourced electronic components. Any move to increase foreign sourcing would exacerbate this concern.

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29. Klaus W. Grewlich, "EUREKA- eureka?" *Aussenpolitik* (1986), p. 27.

30. A.N. Duff, "EUREKA and the New Technology Policy of the European Community," *Policy Studies* (April 1986), p. 45.

U.S. government expenditures on defense and space R&D and procurement are often viewed by other governments as targeting exercises. The Department of Defense has been present at the creation of entire industries. In semiconductors, for example, federal agencies paid for most of the early R&D, trained a substantial part of the work force, bought the entire output, and occasionally provided the physical capital.<sup>31/</sup> Even now, the federal government is taking a series of actions--in response to perceived Japanese targeting--that could easily be described as targeting the U.S. semiconductor industry. The semiconductor accord guarantees a certain domestic floor price and some access to the Japanese market. A proposal exists, and is likely to be funded, that would form a government-subsidized consortium with the expressed purpose of coordinating private efforts to enhance the commercial manufacturing technology of the industry. Federal agencies continue to provide hundreds of millions of dollars for semiconductor research annually. Federal agencies have opposed foreign investment in the U.S. semiconductor industry. In addition, the Department of Defense is investigating ways to reduce use of foreign semiconductors in government-procured weapon systems.

Both relatively and absolutely, the U.S. government spends more on R&D in high-technology industries than any other industrialized country. Efforts to extend the GATT subsidy code to R&D are bound to run afoul of the government's current effort to enhance the commercial usefulness of federal research.

In the area of intellectual property rights, some European Community members have notified the GATT that they consider Section 337 of the U.S. Tariff Act of 1930 to be a trade barrier. Section 337 gives the federal government the authority to restrict imports that infringe on U.S. copyrights or patents if such imports harm a domestic industry. The EC's complaint is that if a U.S. firm violates a patent or copyright, it can be sued; whereas if a foreign firm is believed to be violating a patent or copyright it can be sued and also charged with a Section 337 violation, concurrently or sequentially. This double jeopardy is felt to discriminate against imports.

### IMPLICATIONS OF LIBERALIZED TRADE

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The Uruguay Round does not aim to produce major breakthroughs in the treatment of high-technology trade. As noted above, the bulk of high-tech-

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31. Philip Webre, "Technological Progress and Productivity Growth in the U.S. Semiconductor Industry" (Ph.D. dissertation, American University, 1983), pp. 93-111.

nology trade is already covered by GATT. The hope, rather, is to reduce some of the frictions that beset trade in this field. If the negotiations were to reduce the nontariff barriers the way previous rounds reduced tariffs, they would greatly improve the international climate for high-technology trade. On the other hand, since U.S. high-technology companies already have some access to all major markets for their goods, even the most favorable outcome that can be realistically foreseen would bring only a marginal improvement in the high-technology balance of trade. A substantial opening of Japanese high-technology markets would indeed prove beneficial, but there is little in postwar Japanese commercial practice to encourage hope for such improvement.

A substantial reduction in nontariff barriers will be hard to achieve in the current round. Unlike tariffs, these have as much to do with intent as with practice. Efforts to open these markets will run counter to national policies in both developing and developed countries, with the likelihood that as one set of nontariff barriers is proscribed, others will be found to replace them. The major exception to this lies in the secular trend toward privatization of telephone and telegraph systems in Western Europe and Japan, which promises to lower the barriers to trade in telecommunications equipment in the aggregate.<sup>32/</sup>

An area in which the Uruguay Round may make some substantial progress is that of intellectual property rights. A number of ineffectual organizations currently deal with intellectual property rights disputes, including the World Intellectual Property Organization, the Berne Convention, and the Universal Copyright Convention. Since intellectual property rights are part of the Uruguay Round's agenda, ways of integrating them will have to be found.

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32. On the other hand, U.S. telecommunications-equipment exports to Japan have fallen since Nippon Telephone and Telegraph was privatized.

## CHAPTER IV

# AGRICULTURE

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*Governments throughout the world have for many years pursued agricultural policies that support farm prices and incomes. In deference to such policies, GATT has permitted the use of import quotas and export subsidies in agricultural trade. Recently, however, large increases in government farm budgets and the recognition that national farm policies in many countries have been a principal cause of the prolonged depression in world agricultural markets have spurred key national leaders to action. They have agreed, in principle, to negotiate reductions in national agricultural support levels and to change their domestic farm policies so as to make them more responsive to world market conditions.*

*These negotiations will have important consequences for world agriculture. If they stalemate, current tensions could easily escalate into a full-scale trade war in agriculture and possibly spill over into other sectors. In order to succeed, however, major changes in national farm programs may be required, probably involving lower overall support for prices and incomes. A major goal of the reforms--to reduce the production incentives incorporated in most farm programs, or alternatively to break the link between farm income support and production altogether--may require entirely new farm programs. Allowing market conditions to guide farm prices and output would benefit most countries greatly, but some farmers would be made worse off, at least in the near term. This applies most profoundly to farmers who cannot produce at competitive prices, but also for many farmers who currently gain from income supports and subsidies.*

*Short-term schemes to compensate injured farmers might be required for equity and political reasons. Adjustment costs could be lessened by phasing in any agreement over a long period of time, and by allowing each country flexibility in how long-run targets were met. Losses to farmers would also be less if all countries simultaneously opened their markets through a multilateral agreement. This approach would tend to increase export possibilities and raise world prices for many farm products.*

Hopes are high that important agricultural policy reforms can be accomplished during the Uruguay Round. After repeated failures in past GATT negotiations, key national leaders have agreed, in principle, to reforms in their national farm programs that would reduce the impact of those programs on agricultural trade flows and prices.<sup>1/</sup> Negotiators will at-

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1. This was stated in a May 13, 1987, communique from the Council of the Organization for Economic Cooperation and Development.



tempt not only to liberalize agricultural trade policies, but more fundamentally, to reduce the production incentives and consumption disincentives incorporated in the national farm programs; it is these that ultimately motivate most agricultural trade policies. Significant liberalization will also require that GATT's long-standing special treatment of agricultural policy be rescinded.

The major parties in these talks, which have already started, will be developed countries--particularly the United States, the European Community, Japan, Canada, and Australia--since they account for over two-thirds of worldwide agricultural trade. Several of these countries have already begun to reformulate their agricultural policies unilaterally, especially the United States. But farm policies in most countries are still out of step with world market conditions, and lack the flexibility to adjust quickly when market conditions change--especially when world prices fall.

### RECENT TRENDS IN AGRICULTURAL TRADE

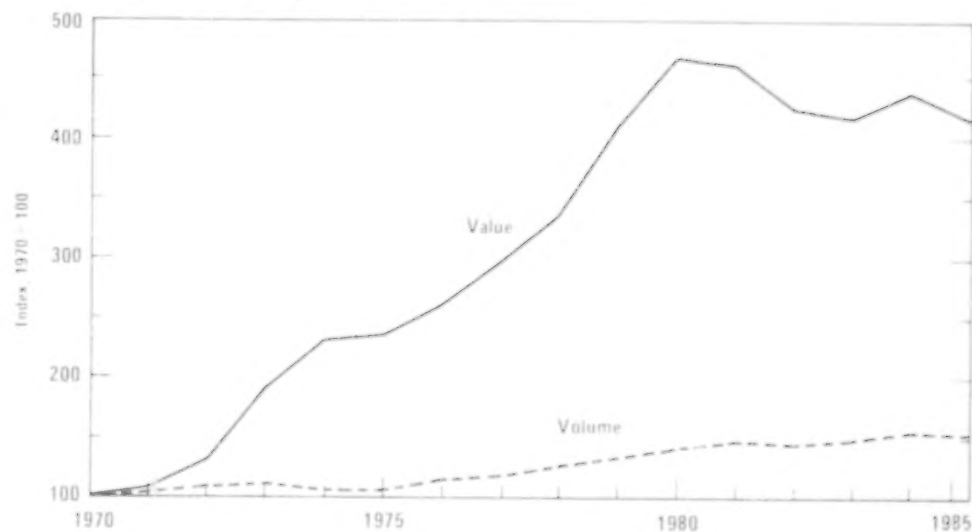
For the world as a whole, the supply of agricultural products has grown faster than the demand for them in recent years. The result has been to force down the prices of most agricultural commodities on world markets. China, the European Community, and to a lesser extent India have emerged as major exporters, while U.S. exports have declined substantially.

In value terms, world agricultural exports declined by about 11 percent between 1980 and 1985, compared with an increase of over 450 percent during the 1970s (see Figure 1). Most of the change in export values resulted from large swings in agricultural prices: unit values rose by almost 300 percent in the 1970s, while export volumes increased by 41 percent.<sup>2/</sup>

2. Prices in world agricultural markets tend to be highly volatile in the short run because of rigidities in national markets and erratic weather conditions. Governments often stabilize or support domestic agricultural prices in an effort to insulate their farm economies from the "disruptive" effects of international markets. This process limits the number of people worldwide who actually buy and sell at world prices. Even when domestic prices are allowed to change, agricultural producers and consumers tend to respond slowly and weakly to new prices. Thus, when international market conditions vary, world prices must move substantially to induce a sufficient response in domestic markets to relieve market pressures.

These same factors can prolong often extreme conditions in world markets by limiting adjustment in domestic markets. Over several years, producers and consumers--especially the former--can respond significantly to large and persistent changes in price. Once momentum is built up, however, it is often difficult to reverse. It can take a number of years for a large and protracted swing in world prices to bring about a meaningful turnaround in world market conditions.

Figure 1.  
World Agricultural Exports



SOURCES: Congressional Budget Office, *Greenbook Paper*, and Tariff and Trade, *International Trade* 85-86.

In the 1980s prices have fallen by about 18 percent, and export volumes increased only about 6 percent. Stockpiles of agricultural commodities, another indicator of weak market conditions, have increased significantly during the 1980s.<sup>3/</sup>

3. The agricultural boom in the 1970s reflected increases in real per capita income (especially in developing countries), a prolonged real depreciation of the U.S. dollar, easy access to financial credit, and policy changes favoring agricultural imports by centrally planned countries. A reversal in these factors, together with farm policies in many countries that maintained production incentives even as world demand declined, led to the subsequent depression in world agricultural markets in the 1980s. Good weather in many key producing areas over this period, especially in Europe, also weakened markets. Another reversal in several of these factors, in particular the recent depreciation of the dollar and changes in several countries' farm policies, may over time improve agricultural trade conditions somewhat.

### The Decline in U.S. Exports

World market shares of key agricultural producers have shifted in the 1980s, especially for the United States. The decline in the U.S. share of world markets has been especially large for wheat and coarse grain exports. The U.S. share of the world wheat market fell from about 45 percent in 1981 to about 30 percent in 1986, while its share in coarse grains--such as corn, barley, and sorghum--dropped from about 65 percent to about 44 percent (see Table 6). Australia and Argentina were the largest gainers of market share in wheat exports over this period, as were China and Western Europe in coarse grains.

The value of U.S. agricultural exports has fallen significantly in nominal terms over the last five years--from a record level of \$43.3 billion in 1981 to just \$26.1 billion in 1986 (see Table 7). This decline can be attributed almost equally to reductions in agricultural prices and to reduction in export volume. Major reductions in agricultural export values occurred for almost every important export product except animal products. Grains, which made up almost 45 percent of the total value of U.S. agricultural exports in 1981, contributed only about 26.5 percent by 1986. The United States has suffered not only from the stagnant world market for agricultural products, but it has also lost some of its share in world markets for almost every major commodity group. The United States, nevertheless, is still the world's largest exporter of agricultural products--predominantly exporting food grains such as wheat and rice, coarse grains, oilseeds and products, cotton, tobacco, and animal products.

The largest single purchaser of U.S. agricultural exports is Japan, although sales to the combined European Community exceed those to Japan (see Table 8). Other key markets for U.S. agricultural products include: East Asian countries such as South Korea and Taiwan; the Soviet Union and Eastern European countries; Latin America, especially Mexico; and Canada. Developed countries buy about half of all U.S. agricultural exports, while sales to developing countries contribute about another 40 percent. Sales to centrally planned economies have decreased in relative importance during the 1980s.

### The Rise in U.S. Imports

While U.S. exports have fallen, U.S. imports have increased steadily during the 1980s (see Table 7). The chief agricultural products imported by the United States are: coffee and cocoa; animal products, including dairy

TABLE 6. WORLD MARKET SHARES FOR WHEAT AND COARSE GRAINS IN TRADE YEAR 1985/1986 (In millions of metric tons, shares in percent)

| Country         | Production | Trade | Trade<br>as Percent<br>of Production <sup>a/</sup> | Share of<br>World Trade |               |
|-----------------|------------|-------|----------------------------------------------------|-------------------------|---------------|
|                 |            |       |                                                    | 1980/<br>1981           | 1985/<br>1986 |
| Wheat           |            |       |                                                    |                         |               |
| World           | 499.0      | 84.9  | 17.0                                               | ...                     | ...           |
| Major Exporters |            |       |                                                    |                         |               |
| United States   | 66.0       | 25.0  | 37.9                                               | 44.5                    | 29.4          |
| Canada          | 24.3       | 16.8  | 69.1                                               | 18.1                    | 19.8          |
| Australia       | 16.1       | 16.0  | 99.4                                               | 11.3                    | 18.8          |
| EC-12           | 71.7       | 15.6  | 21.8                                               | 16.7                    | 15.4          |
| Argentina       | 8.5        | 6.1   | 71.8                                               | 4.1                     | 7.2           |
| Major Importers |            |       |                                                    |                         |               |
| USSR            | 78.1       | 15.7  | 17.1                                               | 17.0                    | 18.5          |
| China           | 85.8       | 6.6   | 7.1                                                | 14.7                    | 7.8           |
| Japan           | 0.9        | 5.5   | 85.9                                               | 6.2                     | 6.5           |
| Coarse Grains   |            |       |                                                    |                         |               |
| World           | 844.6      | 83.4  | 9.9                                                | ...                     | ...           |
| Major Exporters |            |       |                                                    |                         |               |
| United States   | 274.9      | 36.4  | 13.2                                               | 64.2                    | 43.6          |
| Argentina       | 17.1       | 9.7   | 56.7                                               | 13.2                    | 11.6          |
| EC-12           | 88.3       | 8.0   | 9.1                                                | 5.5                     | 9.6           |
| China           | 82.3       | 7.1   | 8.6                                                | 0.0                     | 8.5           |
| Canada          | 25.0       | 5.8   | 23.2                                               | 5.1                     | 7.0           |
| Major Importers |            |       |                                                    |                         |               |
| Japan           | 0.4        | 21.5  | 98.2                                               | 17.2                    | 25.8          |
| USSR            | 100.0      | 13.5  | 12.1                                               | 21.8                    | 16.2          |
| EC-12           | 88.3       | 5.7   | 6.4                                                | 18.3                    | 6.8           |

SOURCES: U.S. Department of Agriculture and Congressional Budget Office.

NOTE: A trade year for wheat covers activity between July and June. For example, trade year 1985/1986 covers the period from July 1985 through June 1986. A trade year for coarse grains is from October to September. Trade years are adjusted for different production seasons in the Northern and Southern Hemispheres.

- a. Trade as a percent of production for exporters is the ratio of exports to production, and for importers the ratio of imports to total domestic utilization. Production is not adjusted for stock carryover. For example, allowing for stock carryover, Australia generally exports between 80 percent and 90 percent of its wheat production.